

EPSON®

Home Theatre Projector

User's Guide

EMP-TW100



About The Manuals and Notations Used

Types of Manual

The documentation for your EPSON projector is divided into the following four manuals. Refer to the manuals in the order given below.

① Unpacking and Installation Guide

This manual contains information on the procedures from unpacking the projector through to starting to use the projector, and also describes the included accessories.

② Safety Instructions/World-Wide Warranty Terms

This manual contains information on using the projector safely, and also includes safety instructions, world-wide warranty terms and a troubleshooting check sheet.

Be sure to read this manual thoroughly before using the projector.

③ Setup Guide





This manual describes the preparations required in order to start using the projector (such as remote control preparation and connecting video equipment or a computer).

④ User's Guide (this manual)

This *User's Guide* contains information on basic operation, using the projector menus, troubleshooting and maintenance.

Notations used in this User's Guide

General information

	Indicates procedures where personal injury or damage to the projector may occur if the procedures are not followed correctly.
	Indicates additional information and points which may be useful to know regarding a topic.
	Indicates that an explanation of the underlined word or words in front of this symbol appears in the glossary of terms. Refer to the "Glossary" in the "Appendix". (p.59)
	Indicates operating methods and the order of operations. The procedure indicated should be carried out in the order of the numbers.

Meaning of "unit" and "projector"

When "unit" or "projector" appears in the text of this *User's Guide*, they may refer to items which are accessories or optional equipment in addition to the main projector unit itself.

Contents

Features of the Projector	2
Basic Operations	
Turning On the Projector.....	6
Connecting the Power Cord	6
Turning On the Power and Projecting Images.....	7
Turning Off the Projector.....	8
Adjusting the Screen Image	10
Adjusting the Image Size	10
Adjusting the Image Angle	10
Correcting Keystone Distortion.....	11
Displaying a Test Pattern.....	12
Adjusting the Image Quality.....	13
Focusing the Screen Image.....	13
Selecting the Color Mode.....	13
Selecting the Image Aspect Ratio	14
Automatic Adjustment of Computer Images	16
Advanced Operations	
Functions for Enhancing Projection	18
Using the Environment Setting Menus.....	18
Description of Functions	21
Saving and Retrieving Image Quality Settings (Memory)	22
Using the Menu Functions	24
Video Menu	25
Advanced Menu	29
Setting Menu	30
About Menu.....	31
Reset All Menu.....	32
Troubleshooting	
Using the Help	34
When Having Some Trouble	35
When the Indicators Provide No Help.....	37
Appendices	
Maintenance	44
Cleaning	44
Replacing Consumables	45
Optional Accessories.....	49
List of Supported Signal Resolutions	50
Component Video Input	50
Composite Video/S-Video Input	50
RGB Input	51
Specifications	52
Appearance	54
Part Names and Functions	55
Front/Top.....	55
Control Panel.....	56
Rear	57
Base	57
Remote Control	58
Glossary	59
Index	61

Basic Operations



Advanced Operations



Troubleshooting



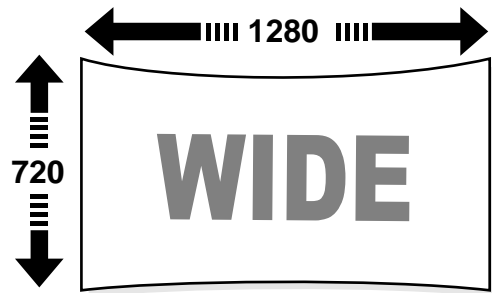
Appendices



Features of the Projector

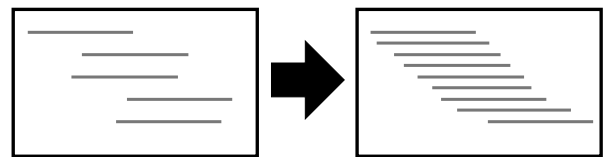
Adoption of a wide 1280 x 720 dot panel

This panel allows high-definition images to be reproduced accurately.



Adoption of a special high-resolution DCDi™ video circuit developed by Faroudja.

This circuit greatly reduces the jagged edges that resulted from conventional progressive conversion, to produce much smoother and natural movement. (p.29)

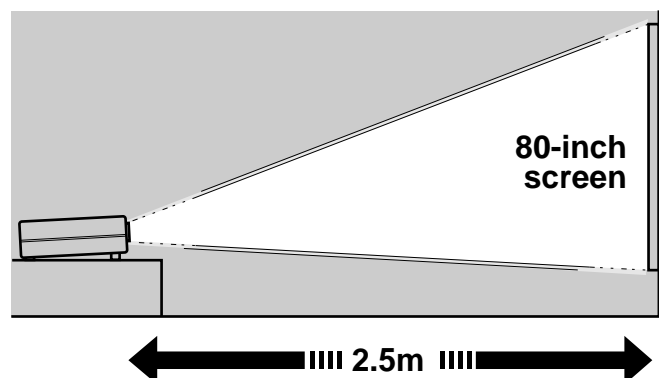


Adoption of a three-dimensional Y/C separation function in the video processing circuit

This greatly reduces the noticeable color interference at the color boundaries of composite video™ signals, resulting in sharper and smoother reproduction of images.

Adoption of a short focal-length lens that can project onto 80-inch screens at distances of 2.5m (8.2 ft.)

This lens is ideal for projecting onto large indoor screens. The projector can also project onto 100-inch screens in rooms with an area of about 10 m². (Refer to the *Setup Guide*.)

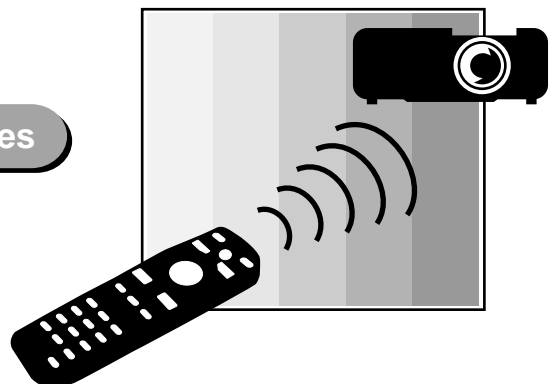


Uses five color modes

You can select the desired color mode to match the images being projected from five preset modes in order to obtain the optimum image quality. (p.13)

Includes a variety of color adjustment modes

Various color settings can be adjusted to suit your preferences, from individual RGB balance adjustment to setting the color temperature of your choice. The adjusted settings can then be stored in memory and recalled at a touch of a button on the remote control. (p.26, 28)





*Speakers are not included with the projector and must be purchased separately.

Basic Operations

This chapter describes basic operations such as turning the projector on and off and adjusting the projected images.

Turning On the Projector 6

- Connecting the Power Cord 6
- Turning On the Power and Projecting Images..... 7

Turning Off the Projector 8

Adjusting the Screen Image..... 10

- Adjusting the Image Size 10
- Adjusting the Image Angle 10
- Correcting Keystone Distortion 11
- Displaying a Test Pattern 12

Adjusting the Image Quality..... 13

- Focusing the Screen Image 13
- Selecting the Color Mode..... 13
- Selecting the Image Aspect Ratio..... 14
 - Normal mode 14
 - Squeeze mode 15
 - Zoom mode 15
 - Through mode..... 15
 - Squeeze Through mode 15
- Automatic Adjustment of Computer Images 16

Turning On the Projector

This section describes the procedure from turning on the power to projecting images.

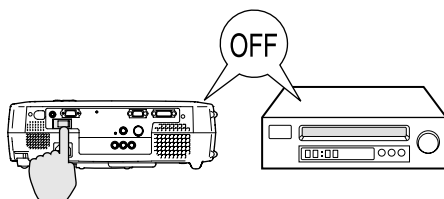


Be sure to read the separate *Safety Instructions/World-Wide Warranty Terms* and check the points that must be noted before using the projector to project images.

Connecting the Power Cord

Procedure

1



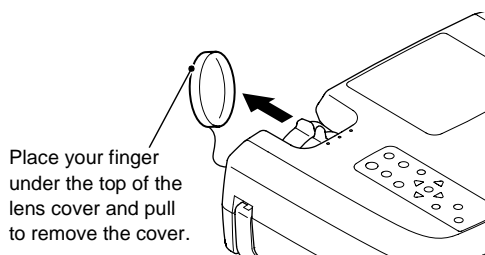
Check that the power is turned off for the projector and all components connected to the projector.

2

Connect the computer or other video source to the projector.

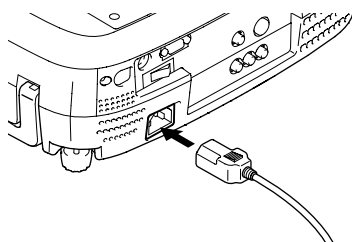
Refer to the *Setup Guide*.

3



Remove the lens cover.

4



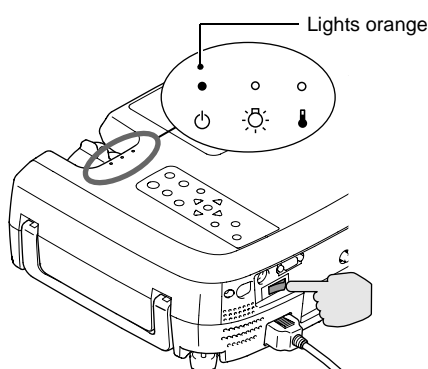
Connect the accessory power cord to the projector.

Check that the power cord connector is facing the same way as the power inlet on the projector, and then insert the power cord connector securely into the projector.


5

Connect the other end of the power cord to a grounded electrical outlet.


6



Turn on the main power switch at the rear of the projector.

Wait until the  indicator lights orange.



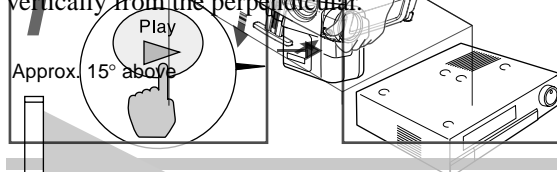
The buttons on the projector control panel and remote control cannot be operated while the  indicator is flashing orange. Wait until it lights steadily.

Correcting Keystone Distortion of Images

Procedure

When images in squeeze mode are displayed on a 4:3 TV screen, a type of distortion known as "keystone distortion" may occur.

Keystone correction can be carried out if the angle of the projector is within a range of approximately 15° vertically from the perpendicular.



Retract the front adjustable foot if it is extended.

Gently push down on the projector while pressing the [Play] button. (Use this setting if the connected video source has a 16:9 output mode (Squeeze mode).)

Turn on the power for all equipment connected to the projector.

If images in squeeze mode are viewed on a horizontal screen, press the [Image] button on the video source to start playback if necessary. Check that the [O] indicator on the projector has stopped flashing and the images are projected correctly in their native wide-screen (16:9) format.

Attach the lens cover.

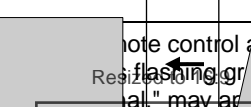
Attach the lens cover to the lens when not using the projector's lens from the projector's control panel.

When images output in 4:3 format are projected using the projector's squeeze mode, the [O] indicator flashes green, and after a short projection starts and the image will appear correctly. Check that the [O] indicator has stopped flashing and lights green. (This takes approximately 15 seconds.)

Procedure

Zoom mode

The button on the projector's control panel cannot be operated while the projector is in zoom mode. The message "Zoom mode" may appear.



While holding down the [Shift] button on the projector's control panel, press the [Keystone-] or [Keystone+] button.

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If more than one signal source has been connected, use the remote control or control panel buttons to select the port to which the signal source that you would like to use is connected to, while referring to the following table.

Port	Button to press	Display at top-right of screen *
Projector	[A]	INPUT A
Remote control	[B]	INPUT B
[Source]	[S-Video]	S-Video
Projector	[Video]	Video
Projector	[D-RGB]	D-RGB

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the images become uneven in appearance after keystone correction is carried out, decrease the "Sharpness" setting (p.25-26).
If only one signal source has been connected, the signals from that source will be projected without needing to press one of the above buttons that are not vertically resized.
Keystone correction can also be carried out using the projector's environment setting menu. (p.30)
If the "No-Signal" message does not disappear, check the connections again.

If a laptop computer or a computer with an LCD screen has been connected to the projector, the images may not be projected sharply. When making the connections, check that the computer has been set up to output signals that the projector has not been set up at an angle which exceeds the proper limit.
The following table shows examples of how to toggle output settings. For details, refer to the section of the documentation provided with your computer under a heading such as "External output", "Connecting an external monitor" or similar.

NEC	Panasonic	Toshiba	BM	Sony	Fujitsu	Macintosh
[Fn]+[F3]	[Fn]+[F3]	[Fn]+[F5]	[Fn]+[F7]	[Fn]+[F7]	[Fn]+[F10]	Control Panel adjustments so that Mirroring is active.

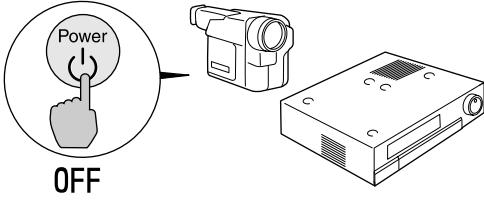
The portions that are not vertically resized will appear with higher image quality.

Turning Off the Projector

Follow the procedure below to turn off the power of the projector.

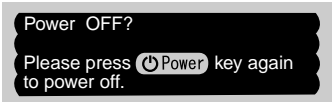
Procedure

- 1**



Turn off the power for the signal sources that are connected to the projector.

Check that the power for all connected components has been tuned off.
- 2**

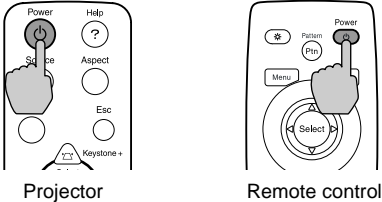


Press the [Power] button on either the remote control or the projector's control panel.


The confirmation message shown at left will appear.

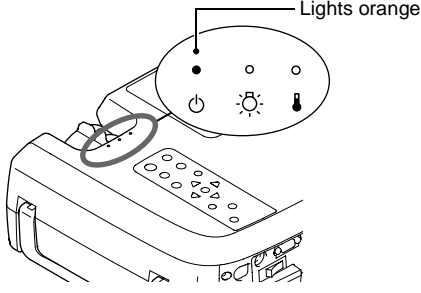
If you do not want to turn off the power, press any button except the [Power] button.


If you do not carry out any operation, the message will disappear after seven seconds. (The power will not turn off at this time.)
- 3**




Press the [Power] button once more.

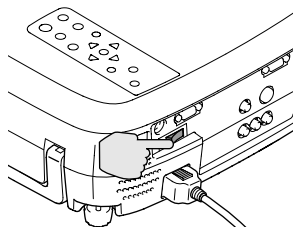
The lamp unit will turn off and the  indicator will flash orange as the cool-down period starts.
- 4**



Check that the  indicator has changed to light orange.

When the  indicator lights orange, cool-down is complete.

The cool-down period lasts for approximately 2 minutes. (This varies depending on factors such as the ambient air temperature.)
- 5**



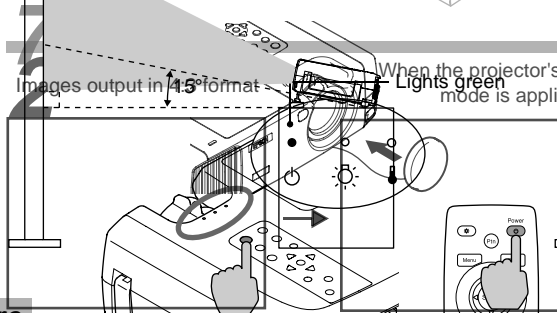
If not using the projector for long periods of time, turn off the main power switch at the rear of the projector.



Do not turn off the main power switch at the rear of the projector while the cool-down is in progress. If the main power switch is turned off before cool-down is complete, wait for the lamp to cool down (normally about one hour is required) before turning the power back on again. If the power is turned off and on before the lamp has cooled down, it may result in lamp operating errors. Refer to "Lamp operating error" on page 35.

Procedure

Keystone correction can be carried vertically from the perpendicular.



screen, a type of distortion known as "keystone
Gently push down on the projector while pressing
the projector is within a range of approximately 15
Turn on the power for all equipment
connected to the projector.

Attach the lens cover

When images output in 4:3 format are projected using the projector's squeeze indicator, flashes green, and after a short projection starts and the image will appear Check that the indicator has stopped flashing and lights green. (This takes approximately 15 seconds.)

Procedure

Zoom mode

4:3 image cut at top and bottom

...note control a
...flashing gr
...sized to 100
...al." may ar

While holding down the [Shift]

button on the projector's control panel, press the

[Keystone-1] or [Keystone-30]
 button. The top and bottom of the image output in 4:5 format are truncate at the top and bottom by a set amount and then projected in a 16:9 format.

3 If more than one signal source has been connected, use the remote control or the panel buttons to select the port which the signal source that you would like to use is connected to, while referring to the following table.

Sony	Fujitsu	Macintosh
Because of this, the size of the displayed images will change depending on the input resolution.	After startup, change the Control Panel adjustments so that Mirroring is active.	

Adjusting the Screen Image

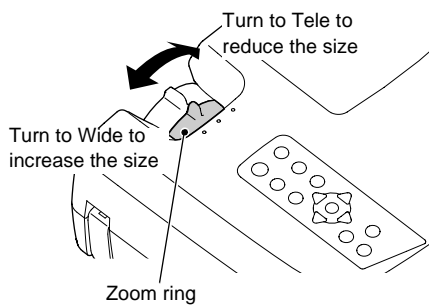
You can adjust the screen image in order to obtain the best possible picture.

Adjusting the Image Size

The size of the projected image is basically determined by the distance from the projector to the screen. (Refer to the *Setup Guide*.)

The following procedures explain how to adjust the screen image once the projector itself has been set up.

Procedure



Turn the zoom ring on the projector to adjust the image.

The image can be enlarged in this way to 1.35 times the normal size.

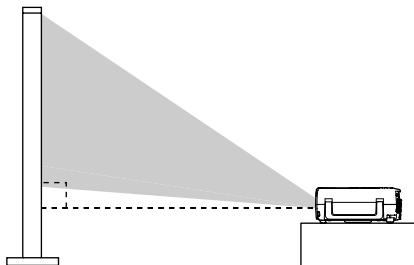
If you would like to enlarge the image further, move the projector further away from the screen. (Refer to the *Setup Guide*.)

Adjusting the Image Angle

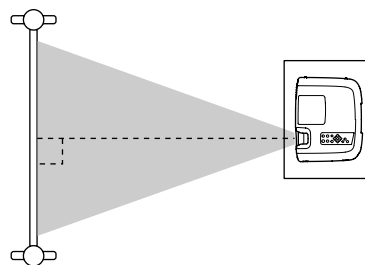
The projector should be as perpendicular to the screen as possible.

If the projector cannot be set up so that it is exactly perpendicular to the screen, it can be set up so that it is tilting slightly horizontally or vertically. To tilt the projector upward, adjust the front adjustable foot to tilt the projector at an angle of up to a maximum 12°.

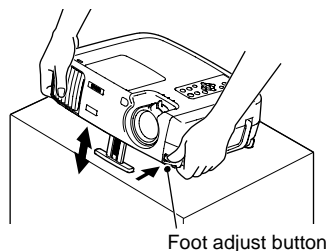
Seen from the side



Seen from above



Procedure



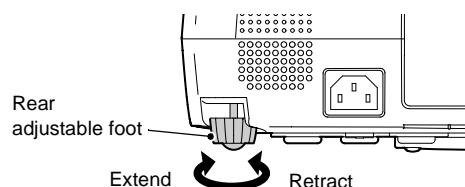
While pressing the foot adjust button, lift up the front of the projector so that the front adjustable foot can extend.

Extend the front adjustable foot until the desired angle is obtained, and then release the foot adjust button.

To retract the foot, press and hold the foot adjust button and gently lower the projector.



- When the foot is adjusted, it may cause the projected images to become distorted. Use the keystone correction function to adjust this distortion. (p.11)
- If the projector is tilted horizontally, adjust by turning the rear adjustable foot.

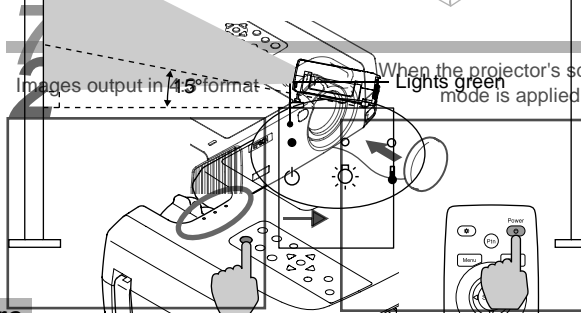
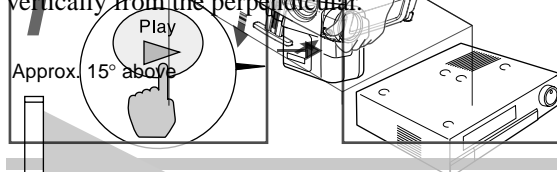


Correcting Keystone Distortion of Images

Procedure

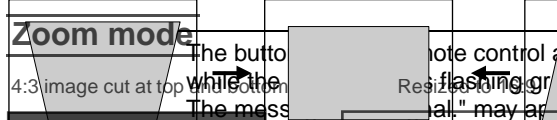
When images in squeeze mode are displayed on a 4:3 TV screen, a type of distortion known as "keystone distortion" may occur.

Keystone correction can be carried out if the angle of the projector is within a range of approximately 15° vertically from the perpendicular.

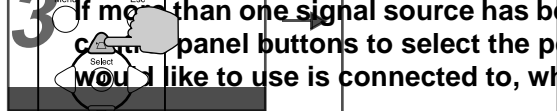


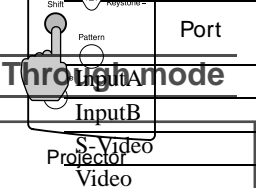


Procedure

Attach the lens cover to the lens when not using the projector.



If more than one signal source has been connected, use the remote control or control panel buttons to select the port which the signal source that you would like to use is connected to, while referring to the following table.



 <p>Through mode</p>	Port	Button to press	Display at top-right of screen *				
InputA		Projector [A]	INPUT A				
InputB		Projector [B]	INPUT B				
S-Video		Projector [S-Video]	S-Video				
Video		Projector [Video]	Video				
D-RGB/A-RGB-DVI		Projector [D-RGB]	D-RGB				
	<p>When keystone correction is carried out, the projected image will become smaller.</p> <ul style="list-style-type: none">The keystone correction settings are memorized, so that if you change the position or angle of the projector, you may need to readjust the keystone correction settings.						
	<p>If the images become uneven in appearance after keystone correction is carried out, decrease the "Sharpness" setting (p.25-26).</p> <p>Keystone correction can also be carried out using the projector's environment setting menu. (p.30)</p> <p>If the "No-Signal" message does not disappear, check the connections again.</p>						
<p>Squeeze</p> <p>If a laptop computer or a computer with an LCD screen has been connected to the projector, the images may not be projected straight away. After making the connections, keystone correction is being carried out. It indicates that the limit for horizontal or vertical keystone correction has been exceeded. Check that the computer has been set up to output signals.</p> <p>The following table shows examples of how to toggle output settings. For details, refer to the section of the documentation provided with your computer under a heading such as "External output", "Connecting an external monitor" or similar.</p>							
	NEC	Panasonic	Toshiba	BM	Sony	Fujitsu	Macintosh
	[Fn]+[F3]	[Fn]+[F3]	[Fn]+[F5]	[Fn]+[F7]	[Fn]+[F7]	[Fn]+[F10]	[Fn]+[F10]

Retract the front adjustable foot if it is extended.

Gently push down on the projector while pressing the [Play] button on the control panel.

Use this setting if the connected video source has a 16:9 output mode (Squeeze mode).

Turn on the power for all equipment connected to the projector.

If images in squeeze mode are viewed on a video source, press the [Play] button on the control panel to start playback if necessary.

Check that the [C] indicator on the projector has stopped flashing and the images are projected correctly in their native wide-screen (16:9) format.

Attach the lens cover to the lens when not using the projector.

When images output in 4:3 format are projected using the projector's squeeze mode, the [C] indicator flashes green, and after a short projection starts and the image will appear correctly.

Check that the [C] indicator has stopped flashing and lights green. (This takes approximately 15 seconds.)

While holding down the [Shift] button on the projector's control panel, press the [Keystone] or [Keystone 10] button.

Images output in 4:3 format are truncate at top and bottom by a set amount and then projected in a 16:9 format.

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

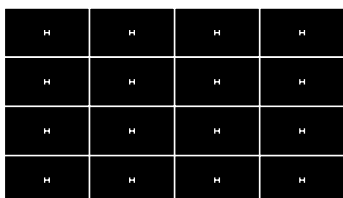
If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for

Displaying a Test Pattern

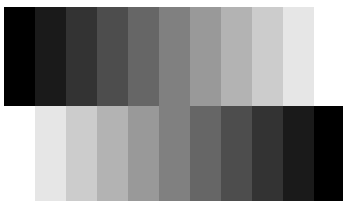
When setting up the projector, you can project a test pattern onto the screen and use this test pattern to adjust the projected images before a video source has been connected. The following two types of test pattern are available.

- Crosshatch



This can be used to adjust the focus and correct keystone distortion.

- Grayscale pattern



This can be used to adjust dark and light shades to the desired shade. The adjustment can be carried out using the "Color Temp" or "RGB" setting in the "Color Adjustment" item of the projector's "Video" menu.

The test pattern changes as shown below each time the [Pattern] button on either the remote control or the projector's control panel is pressed.

Crosshatch → Grayscale pattern → No pattern



The full environment setting menu cannot be displayed while a test pattern is being projected. If you need to change a setting, use the line menu or the [Keystone] buttons on the projector's control panel.

Adjusting the Image Quality

Focusing the
Screen Image

Selecting the Image
Aspect Ratio

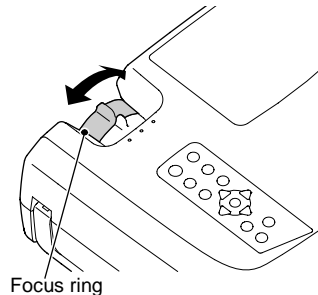
Selecting the
Color Mode

Automatic Adjustment
of Computer Images

The quality of the screen images can be adjusted as follows.

Focusing the Screen Image

Procedure



Turn the focus ring to adjust the image focus.



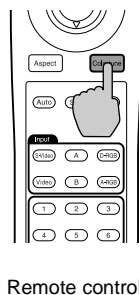
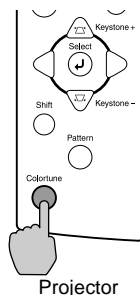
- If the surface of the lens is dirty or misted over as a result of condensation, it may not be possible to adjust the focus correctly. If this happens, clean or de-mist the lens. (p.44)
- If the projector is positioned outside the normal projecting range of 0.9 - 13 m (2.9 - 42.6 ft.), it may not be possible to obtain the correct focus. If you have trouble obtaining the correct focus, check the projection distance.

Selecting the Color Mode

The following five color modes have been preset for use with images with varying characteristics. You can use these color modes to obtain the optimum image quality easily, just by selecting whichever color mode best suits the images. The brightness of the projected images will vary depending on the mode.

Mode name	<u>Gamma</u> »	<u>Color Temp</u> »	Priority element	<u>Black & white extension function</u> »	Use
Dynamic	Original 1	6700 K (adjustable)	Color	Enabled	Ideal for projecting images with greater modulation and intensity.
Theatre	Original 2	6700 K (adjustable)	Color	Enabled	Ideal for enjoying presentations such as movies which have large numbers of dark scenes.
Natural	2.2 (Basic)	6700 K (adjustable)	Color	Disabled	Ideal for enjoying presentations in a natural atmosphere.
PC	2.2 (Basic)	7500 K (adjustable)	Brightness	Disabled	Ideal for use in making images as bright as possible when projecting computer images.
<u>sRGB</u> »	2.2 (Basic)	6500 K (fixed)	Color	Disabled	Images conform to the sRGB standard. If the connected video source has an sRGB mode, set both the projector and the video source to sRGB.

Procedure



The color mode changes as shown below each time the [Colortune] button on either the remote control or the projector's control panel is pressed.

Dynamic → Theatre → Natural → PC → sRGB

The current setting appears on the screen each time the color mode changes.



The color mode setting can also be changed using the "Color Mode" item of the projector's "Video" menu. (p.25, 27)

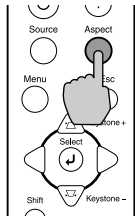
Selecting the Image Aspect Ratio

The aspect ratio for projected images can be selected from the following five types of setting. However, the aspect ratio settings that can be selected will vary depending on the input signal.

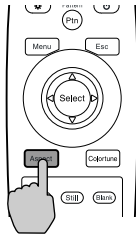
Input signal	Normal	Squeeze	Zoom	Through	Squeeze Through
Video (SDTV)	O	O	O	O	O
Video (HDTV)	O	-	-	O	-
Computer (SVGA or lower)	O	-	O	O	-
Computer (XGA or higher)	O	-	O	-	-

Do not use the aspect mode function to elongate or compress image that are being projected for commercial purposes or in public places such as hotel lobbies or stores, as doing so may infringe the rights of the original copyright owner for the images under copyright protection laws.

Procedure



Projector



Remote control

The aspect ratio changes as shown below each time the [Aspect] button on either the remote control or the projector's control panel is pressed.

Normal → Squeeze → Zoom → Through → Squeeze Through

The current setting appears on the screen each time the aspect ratio changes.



Details of each aspect ratio are as follows.

Normal mode

4:3 image



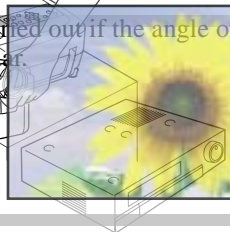
The aspect ratio of the images being input is maintained, and the images are projected into a 16:9 screen area. When 4:3 images are being projected, black bands will appear at the left and right of the image as shown in the illustration at left.

Correcting Keystone Distortion Projecting Images

Procedure

When images in squeeze mode are displayed on a 4:3 TV screen, "keystone distortion" may occur.

Keystone correction can be carried out if the angle of the projector is within a range of approximately 15° vertically from the perpendicular.



Retract the front adjustable foot if it is extended.

Gently push down on the projector while pressing the [Play] button.

Use this setting if the connected video source is within a range of approximately 15° vertically from the perpendicular.

Turn on the power for all equipment connected to the projector.

If images in squeeze mode are viewed on a monitor, press the [Play] button at the video source to start playback if necessary.

Check that the [O] indicator on the projector has stopped flashing and lights green.

Attach the lens cover.

Attach the lens cover to the lens when not using the projector's zoom.

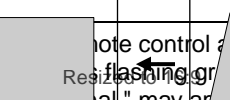
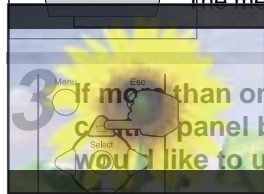
When images output in 4:3 format are projected using the projector's squeeze mode, the [O] indicator flashes green, and after a short time, the image will appear.

Check that the [O] indicator has stopped flashing and lights green. (This takes approximately 15 seconds.)

Procedure

Zoom mode

The button on the projector's control panel cannot be operated while the projector is in zoom mode.



While holding down the [Shift] button on the projector's control panel, press the [Keystone-] or [Keystone+] button.

Images output in 4:3 format are truncated at top and bottom by a set amount and then projected in a 16:9 format.

If more than one signal source has been connected, use the remote control or the projector's control panel buttons to select the port which the signal source that you would like to use is connected to, while referring to the following table.

Port	Button to press	Display at top-right of screen *
Input A	[A]	INPUT A
Input B	[B]	INPUT B
S-Video	[S-Video]	S-Video
Video	[Video]	Video
D-RGB	[D-RGB]	D-RGB
RGB	[RGB]	RGB
DVI-D	[DVI-D]	DVI-D
DVI-I	[DVI-I]	DVI-I

If the input signal resolution is 1280 x 720 dots or less, the images are projected onto the screen with the input signal resolution unchanged. Because of this, the size of the displayed images will change depending on the input. The display disappears after 2 seconds. The picture quality will be best for the input resolution.

If the images become uneven in appearance after keystone correction is carried out, decrease the "Sharpness" setting (p.25-26).

Keystone correction can also be carried out using the projector's environment setting menu. (p.30)

Squeeze mode: When the projector is in squeeze mode, the image will be projected at an angle which exceeds the proper limit. The following table shows examples of how to toggle output settings. For details, refer to the section of the documentation provided with your computer under a heading such as "External output", "Connecting an external monitor" or similar.

Manufacturer	Key Combination
NEC	[Fn]+[F3]
Panasonic	[Fn]+[F3]
Toshiba	[Fn]+[F5]
BM	[Fn]+[F7]
Sony	[Fn]+[F7]
Fujitsu	[Fn]+[F10]
Macintosh	Control Panel adjustments so that Mirroring is active.

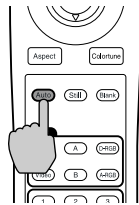
The portions that are not vertically resized will appear with higher image quality.

Automatic Adjustment of Computer Images

This function lets you adjust computer images to the optimum settings.

Automatic adjustment involves adjustment of tracking» display position and synchronization (sync)».

Procedure



Remote control

While an image is being projected from the computer, press the [Auto] button on the remote control.

The screen will appear black while the adjustment is being made.



Automatic adjustment may not work properly with some types of signals which are output by computers. In such cases, you may need to adjust the tracking and synchronization manually using projector's environment setting menu. (p.27)

Advanced Operations

This chapter describes functions for enhancing the projection of images, and how to use the environment setting menus.

Functions for Enhancing Projection 18

- **Using the Environment Setting Menus 18**
 - Displaying and Operating Full Menus 18
 - Displaying and Operating Line Menus 20
- **Description of Functions 21**
 - Black Level Adjustment 21
 - White Level Adjustment 21
 - Color Adjustment 21
- **Saving and Retrieving Image Quality Settings (Memory) 22**
 - Saving Settings 22
 - Retrieving Saved Image Quality Settings 23

Using the Menu Functions 24

- **Video Menu 25**
 - Video 25
 - Computer 27
- **Advanced Menu 29**
- **Setting Menu 30**
- **About Menu 31**
 - Video 31
 - Computer 32
- **Reset All Menu 32**

Functions for Enhancing Projection

This section describes the various useful functions that can be used to enhance projection.

Function	Summary	Reference page
Black level adjustment	Adjusts the brightness of dark shades.	p.21
White level adjustment	Adjusts the brightness of light shades.	p.21
Color adjustment	Adjusts the hues of light shades to the desired level.	p.21

Using the Environment Setting Menus

The functions described here are used to set the adjustment values using the projector's environment setting menus.

There are two types of projector's environment setting menus used:

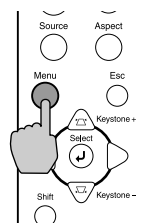
- Full menus : These menus can be used to set all items in the environment setting menus.
- Line menus : These menus can be used to change the "Video" settings while viewing the images being projected. The "Video" menu is the most commonly used of the environment setting menus. (p.20)

Displaying and Operating Full Menus

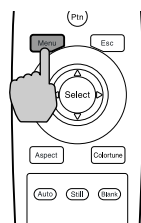
Menus can be operated using the projector's control panel and also by using the remote control.

Procedure

1



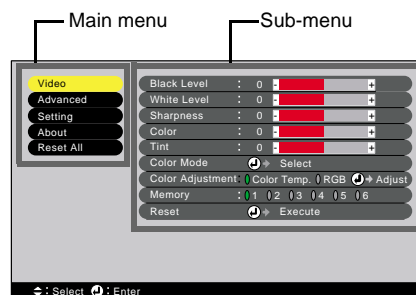
Projector



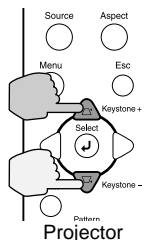
Remote control

Press the [Menu] button on either the remote control or the projector's control panel.

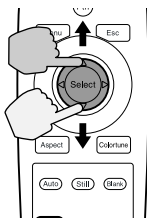
The environment setting menu appears. Full menus consist of a main menu and sub-menus. The sub-menu that corresponds to the currently-selected item in the main menu (displayed in yellow) appears.



2





Projector



Remote control

Select the items to be changed in the main menu.

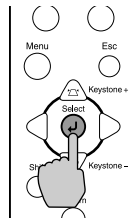
If using the projector's control panel, press the  and  buttons.

If using the remote control, tilt the [Select] button up and down.

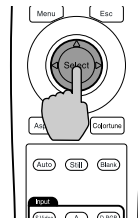
Displaying and Operating Line Menus

Procedure

1



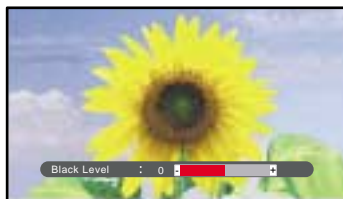
Projector



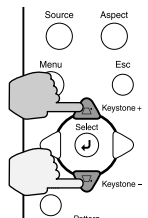
Remote control

Press the [Select] button on either the projector's control panel or the remote control.

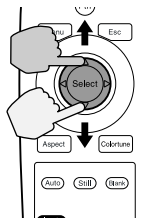
The line menu appears.



2





Projector



Remote control

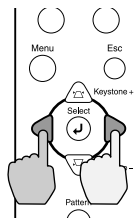
Select an item to be set.

If using the projector's control panel, press the  and  buttons.

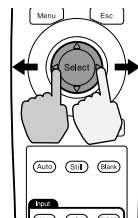
If using the remote control, press the [Select] button up and down.

The line menu item changes when a button is pressed.

3





Projector



Remote control

Select the setting value.

If using the projector's control panel, press the  and  buttons.

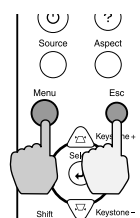
If using the remote control, press the [Select] button to the left and right.

4

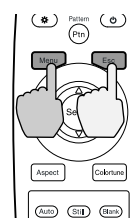
Set other items in the same way.

Repeat steps 2 and 3 to continue making settings. To return to a previous menu level, press the [Esc] button on the projector's control panel or the remote control.

5



Projector



Remote control

Exit the menu display.

Press the [Menu] or [Esc] button on either the projector's control panel or the remote control.



If you do not press a button for 3 seconds while a line menu is displayed, the line menu disappears automatically.



Main menu	Sub-menu	Function	Default setting
Video	Progressive	Selects the projection method.	Film/Auto
Advanced	Motion Detect	Press the [Select] button on either the projector's control panel or the remote control to accept signals projected from the front of the screen.	0
Setting	Noise Reduction	Projector from the front of the screen.	OFF
About	Position	Projector from the side of the screen.	-
Reset All	Video Signal	Projector from the ceiling of the screen.	[Auto]
	Input A	Projection from the rear of the screen.	[Auto]
	Input B	Projection from the rear of the screen.	[Auto]
	Setup Level	Installed to the ceiling upside down.	0%
	Reset		7.5%
	Execute		
Language		Sets the language for message, menu and help displays. • Press the [Select] on either the projector's control panel or the remote control, and select the language from the selection menu that appears.	English
Reset		Returns the adjustment values to the default values. • Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". • Select "Reset All" to return all menu settings to their default settings. (Can only be adjusted for 525i and 625i image signals).	Default Setting
Black Level		Changes signal contrast around as internal of picture progress setting.	0
White Level		The items appearing in the "Video" menu and each field circuit are determined by the input signal. If the brightness of the image is too dark, the black & white extension function does not operate.	Default setting
Sharpness		When set to "Auto", the black & white extension function does not operate.	0
Lamp		Turns off the Lamp adjustment function. The DCDI function operates.	0H
Reset Lamp		Executes the lamp reset function.	Execute
Video Source		Switches the thru video source.	Video
Video Signal		Tracks the video signal.	Tracking
Color Adjustment		Adjusts the color temperature.	Auto
RGB		Repeats steps 2 to 5 to continue making settings.	Repeat steps 2 to 5 to continue making settings.
Flesh tone		Press the [Menu] button on either the projector's control panel or the remote control to enter the color temp. setting menu that appears.	Auto
Green		When set to "Auto", the video signal format is set automatically, but if projecting signals in NTSC format, the setting needs to be made manually.	Auto
Purplish		(Can only be adjusted for 525i and 625i input signals)	Auto
Blue		Selects the blue component.	Auto
High		High (10000 K)	High (10000 K)
Low		Low (2800 K)	Low (2800 K)

Advanced Operations

Saving and Retrieving Image Quality Settings (Memory)

Up to a maximum of six adjustment values in the "Video" and "Advanced" menus can be memorize per input source, and settings for six different sources can be recorded, for a total of 36 possible settings. You can save the adjustment values for particular video scenes, and then use the memory button on the remote control to retrieve these settings at a single touch. (p.26, 28)

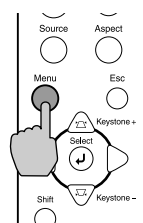
The following adjustment values can be stored in memory.

- Video menu:
Black Level, White Level, Sharpness, Color, Tint, Color Mode, Color Adjustment
- Advanced menu:
Progressive, Motion Detect, Noise Reduction, Setup Level
- Aspect ratio setting
This is the aspect ratio that is selected using the [Aspect] button on the projector's control panel or the remote control.

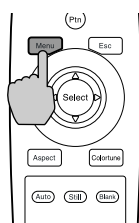
Saving Settings

Procedure

1



Projector

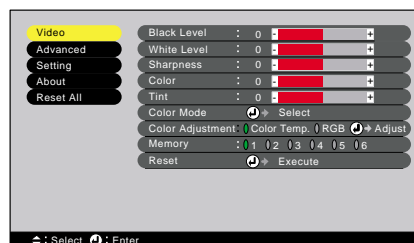


Remote control

Press the [Menu] button on either the projector's control panel or the remote control.

The environment setting menu will be displayed, with the adjustment values appearing as are currently set.

2

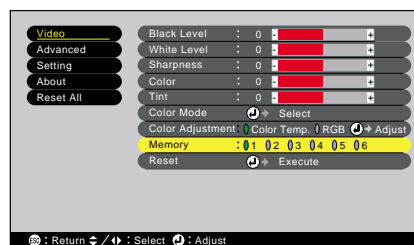


Select "Memory" from the "Video" sub-menu.

If using the projector's control panel, press the Δ and ∇ buttons.

If using the remote control, tilt the [Select] button up and down.

3



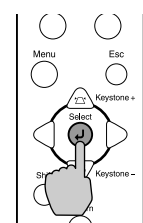
Select the memory number (1 - 6) to use for saving the settings.

If using the projector's control panel, press the \triangleleft and \triangleright buttons.

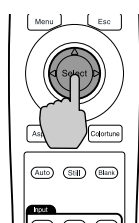
If using the remote control, tilt the [Select] button to the left and right.

The numbers correspond to memory buttons [1] to [6] on the remote control.

4



Projector



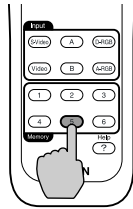
Remote control

Confirm the memory setting.

Press the [Select] button on either the projector's control panel or the remote control.

Retrieving Saved Image Quality Settings

Procedure



Remote control

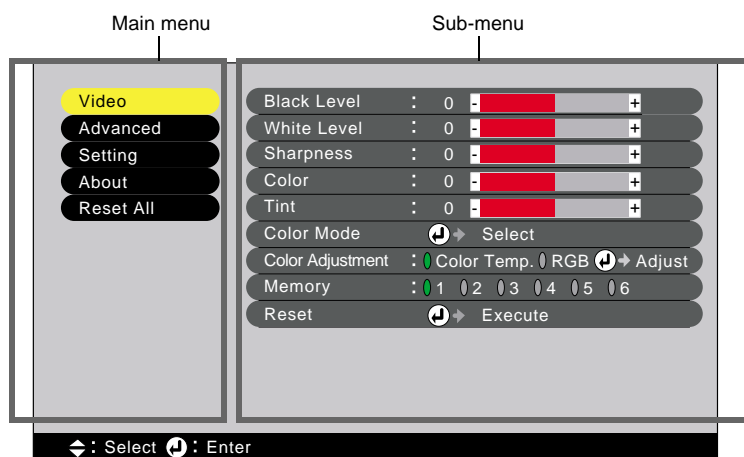
Press one of the remote control memory buttons [1] to [6] corresponding to the image quality settings to be retrieved.

The images being projected will be adjusted according to the settings that are retrieved.

Using the Menu Functions

The environment setting menu can be used to carry out a variety of settings and adjustments. Two types of menu (full menus and line menus) can be used to make environment settings. This section describes all of the functions that are available in the environment setting menu using the full menus as examples. The menus have a hierarchical structure, with a main menu that is divided into sub-menus.

Refer to "Using the Environment Setting Menus" (p.18) for details on using the menus.



Main menu	Sub-menu	Function	Default setting
Video	Color Adjustment	<p>Only one of the following settings can be made at any one time. It is not possible for both settings to be enabled at the same time.</p> <p>Color Temp. ▶▶ setting (p.21)</p> <ul style="list-style-type: none"> •Color Temp. :Allows lighter colors to be adjusted so that they range from having a red tinge to having a blue tinge. When the color temperature is lower, the red content is greater and color tones appear softer. When the color temperature is higher, the blue content is greater and color tones appear fresher. •Flesh tone adjustment:The "Flesh Tone" setting adjusts the green component of image signals. If adjusted to the - side, the colors appear purplish. If adjusted to the + side, the green component is increased. Adjust until the desired flesh tones are obtained. <p>RGB setting (Individual adjustment mode)</p> <ul style="list-style-type: none"> •The Offset ▶▶, Gain ▶▶ and Gamma ▶▶ can be adjusted separately for each RGB component. Offset adjusts coloration for darker shades, Gamma adjusts intermediate shades, and Gain adjusts brighter shades. The working of each adjustment is shown below. <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Offset adjustment</p> </div> <div style="text-align: center;"> <p>Gain adjustment</p> </div> <div style="text-align: center;"> <p>Gamma adjustment</p> </div> </div> <p>The "Color Adjustment" settings correct the digital data after the signals are sampled by the A/D converter.</p> <p>When the Offset setting is adjusted to the + side, dark colors can be set freely as desired.</p> <p>When the Gain setting is adjusted to the - side, light colors can be set freely as desired.</p> <p>When the Gain setting is adjusted to the + side, the brightness is automatically corrected in accordance with the setting value so that the color does not become saturated, so that an S-shaped gamma curve can be easily created.</p> <p>Each RGB component can be adjusted to give the desired level of coloration to dark, intermediate and light ranges.</p>	<p>Color Temp. : 6700K</p> <p>Flesh tone adjustment : 2</p> <p>RGB : Offset R : 0 G : 0 B : 0</p> <p>Gain R : 0 G : 0 B : 0</p> <p>Gamma R : 2.2 G : 2.2 B : 2.2</p>
	Memory	<p>This lets you save image adjustment settings and to retrieve them by pressing the corresponding remote control memory buttons.</p> <p>The images being projected will be adjusted according to the settings that are retrieved. (p.22)</p> <ul style="list-style-type: none"> •The current settings are saved to a particular recording area number when that number is selected. •The setting values that are saved to memory can be cleared by selecting "Reset All". 	-
	Reset	<p>Resets all adjustment values for the "Video" menu functions to their default settings. However, all settings that are stored in memory are retained.</p> <ul style="list-style-type: none"> •Press the [Select] on either the projector's control panel or the remote control to display the confirmation screen, and select Yes. •Select "Reset All" to return all menu settings to their default settings. (p.32) 	-



Advance

Main menu	Sub-menu	Function	Default setting
Video	Progressive	Selects the image format when the projector's control panel or the remote control is being input.	Film/Auto
Advanced	Motion Detect	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	0
Setting	Noise Reduction	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	OFF
About	Position	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	Auto
Reset All	Input A	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	Auto
	Input B	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	Auto
	Setup Level	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	0.0%
	Reset	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	0.75%
	Execute	Press the [Select] button on either the projector's control panel or the remote control to accept a signal from the front of the screen.	
Language		Sets the language for message, menu and help displays.	English
		Press the [Select] button on either the projector's control panel or the remote control, and select the language from the selection menu that appears.	English
Reset		Returns the adjustment values to the default values.	
		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Black Level		Changes signal from the projector's internal circuit to the white level setting.	0
		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
White Level		Changes signal from the projector's internal circuit to the white level setting.	0
		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Video (InputA (Y/CbCr), InputB (Y/CbPr), S-Video, Video)		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Color Adjustment		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Lamp		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Tracking		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Color Temperature		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Flesh tone adjustment		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Input A		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	
Projector		Press the [Select] button on either the projector's control panel or the remote control to display the confirmation function, and select "Yes".	
		Select "Reset All" to return all menu settings to their default settings.	
		(Can only be adjusted for 525i and 625i image signals)	

- The "Flesh Tone" setting adjusts the green component of image signals. If adjusted to the - side, the green component is reduced and colors appear purplish. If adjusted to the + side, the green component is increased. Adjust until the desired flesh tones are obtained.

Main menu	Sub-menu	Function	Default setting
Video	Color Adjustment	<p>Only one of the following settings can be made at any one time. It is not possible for both settings to be enabled at the same time.</p> <p>Color Temp. ▶▶ setting (p.21)</p> <ul style="list-style-type: none"> •Color Temp. :Allows lighter colors to be adjusted so that they range from having a red tinge to having a blue tinge. When the color temperature is lower, the red content is greater and color tones appear softer. When the color temperature is higher, the blue content is greater and color tones appear fresher. •Flesh tone adjustment:The "Flesh Tone" setting adjusts the green component of image signals. If adjusted to the - side, the colors appear purplish. If adjusted to the + side, the green component is increased. Adjust until the desired flesh tones are obtained. <p>RGB setting (Individual adjustment mode)</p> <ul style="list-style-type: none"> •The Offset ▶▶, Gain ▶▶ and Gamma ▶▶ can be adjusted separately for each RGB component. Offset adjusts coloration for darker shades, Gamma adjusts intermediate shades, and Gain adjusts brighter shades. The working of each adjustment is shown below. <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Offset adjustment</p> </div> <div style="text-align: center;"> <p>Gain adjustment</p> </div> <div style="text-align: center;"> <p>Gamma adjustment</p> </div> </div> <p>The "Color Adjustment" settings correct the digital data after the signals are sampled by the A/D converter.</p> <p>When the Offset setting is adjusted to the + side, dark colors can be set freely as desired.</p> <p>When the Gain setting is adjusted to the - side, light colors can be set freely as desired.</p> <p>When the Gain setting is adjusted to the + side, the brightness is automatically corrected in accordance with the setting value so that the color does not become saturated, so that an S-shaped gamma curve can be easily created.</p> <p>Each RGB component can be adjusted to give the desired level of coloration to dark, intermediate and light ranges.</p>	<p>Color Temp. : 7500K</p> <p>Flesh tone adjustment : 5</p> <p>RGB : Offset R : 0 G : 0 B : 0</p> <p>Gain R : 0 G : 0 B : 0</p> <p>Gamma R : 2.2 G : 2.2 B : 2.2</p>
	Memory	<p>This lets you save image adjustment settings and to retrieve them by pressing the corresponding remote control memory buttons.</p> <p>The images being projected will be adjusted according to the settings that are retrieved. (p.22)</p> <ul style="list-style-type: none"> •The current settings are saved to a particular recording area number when that number is selected. •The setting values that are saved to memory can be cleared by selecting "Reset All". 	-
	Reset	<p>Resets all adjustment values for the "Video" menu functions to their default settings. However, all settings that are stored in memory are retained.</p> <ul style="list-style-type: none"> •Press the [Select] on either the projector's control panel or the remote control to display the confirmation screen, and select "Yes". •Select "Reset All" to return all menu settings to their default settings. (p.32) 	-




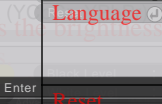
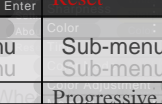
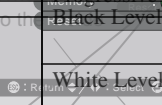
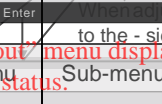
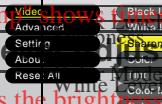
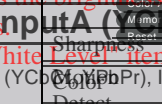

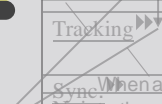
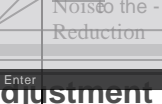
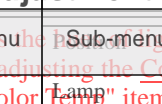


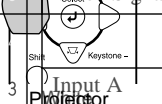
[Main menu](#)

Sub-menu

-RGB DVI-I, InputB (A-RGB) Function

Function
Select a menu item.

Default

	<p>Projection</p> <p>Projection from the front of the screen Projection from the rear of the screen Projection from the ceiling Projection from the side</p>	<p>Control panel or the remote control</p> <p>Press the [Select] button on either the projector's control panel or the remote control to accept a setting.</p>	<p>Projector's control panel or the remote control</p> <p>Press the [Select] button on either the projector's control panel or the remote control to accept a setting.</p>
	<p>Language</p> <p>Sets the language for message, menu and help displays.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control, and select the language from the selection menu that appears. 	<p>English</p> <p>English</p>	<p>English</p> <p>English</p>
	<p>Reset</p> <p>Returns the adjustment value to the default values.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". Select "Reset All" to return all menu settings to their default settings. 	<p>Default setting</p> <p>Default setting</p>	<p>Default setting</p> <p>Default setting</p>
	<p>Black Level</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>White Level</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Color</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input A</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input B</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input C</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input D</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input E</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input F</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input G</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>
	<p>Input H</p> <p>Changes signal from the projector's internal circuitry to the input signal.</p> <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". 	<p>0</p> <p>0</p>	<p>0</p> <p>0</p>

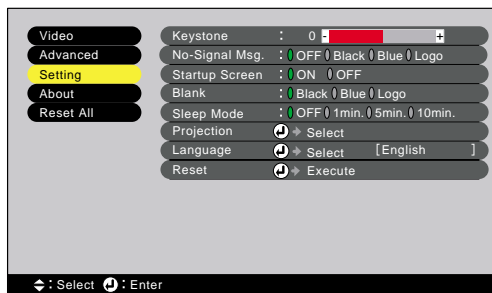
Low
(5000 K)

High
(10000 K)

- The "Flesh Tone" setting adjusts the green component of image signals. If adjusted to the - side, the green component is reduced and colors appear purplish. If adjusted to the + side, the green component is increased. Adjust until the desired flesh tones are obtained.

Main menu	Sub-menu	Function	Default setting
Advanced	Input B	Selects the type of signal being input to the Input B port.	RGB
	Setup Level	(Adjustment is only possible when composite, S-Video, 525i/p or 625i/p signals are being input.) When connecting equipment designed for use within Japan, this setting does not need to be changed. If using equipment designed for use outside Japan that has different black level (setup level) settings, use this function to obtain correct images. Check the specifications of the connected equipment when changing this setting.	0%
	Reset	Returns the adjustment values in the "Advanced" menu to the default values. • Press the [Select] on either the projector's control panel or the remote control to display the confirmation screen, and select "Yes". • Select "Reset All" to return all menu settings to their default settings. (p.32)	-

Setting Menu



Main menu	Sub-menu	Function	Default setting
Setting	Keystone	<ul style="list-style-type: none"> • Corrects keystone distortion in images. (p.11) • When keystone correction is carried out, the projected image will become smaller. • The keystone correction settings are memorized, so that if you change the position or angle of the projector, you may need to readjust the keystone correction setting. • If the images become uneven in appearance after keystone correction is carried out, decrease the "Sharpness" setting. 	0
	No-Signal Msg.	Sets the screen status when no video signal is being input. <ul style="list-style-type: none"> • OFF : Screen is completely black. • Black : Screen is completely black and a no signal message appears. • Blue : Screen is completely blue and a no signal message appears. • Logo : The user's logo is displayed and a no signal message appears. 	Blue
	Startup Screen	Sets whether the startup screen is displayed or not.	ON
	Blank	Sets the screen status when the [Blank] button on the remote control is pressed. The screen status can be selected from "Blue", "Black" or "Logo".	Black
	Sleep Mode	Use this function if you would like the projector's power to switch off automatically when image signals stop being input from the connected equipment. Setting value range : OFF, 1 minutes, 5 minutes, 10 minutes <ul style="list-style-type: none"> • When set to "ON": If the connected equipment has a timer off function, and this function operates to stop the image signal from being input to the projector, the projector's lamp also turns off automatically. This can be used to ensure that the lamp turns off even if the viewer falls asleep while viewing. • When sleep mode has been activated so that the projector is in standby mode, the lamp will not automatically turn back on again even if a image signal is input once more. Press the [Power] button on either the remote control or the projector's control panel to turn the power back on. 	OFF



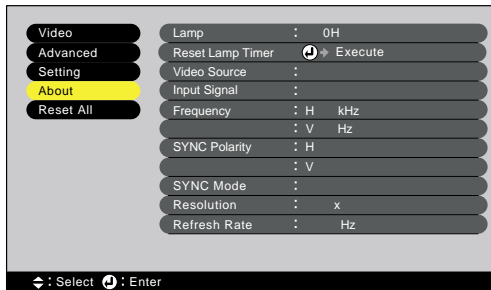
Advance

Main menu	Sub-menu	Function	Default setting
Video	Progressive	Selects the image signal input method.	Film/Auto
Advanced	Motion Detect	Adjusts the motion detection function.	0
Setting	Noise Reduction	Adjusts the noise reduction function.	OFF
About	Position	Adjusts the position of the projected image.	Auto
Reset All	Input A	Resets the input A signal.	Auto
	Input B	Resets the input B signal.	Auto
	Setup Level	Adjusts the setup level.	0.0%
	Reset	Resets the menu.	Execute
Language		Sets the language for message, menu and help displays. • Press the [Select] on either the projector's control panel or the remote control, and select the language from the selection menu that appears.	English
Reset		Returns the adjustment values to the default values. • Press the [Select] on either the projector's control panel or the remote control to display the confirmation function, and select "Yes". • Select "Reset All" to return all menu settings to their default settings. (Can only be adjusted for 525i and 625i image signals)	Default setting
Main menu	Sub-menu	Function	Default setting
Main menu	Sub-menu	Function	Default setting
Advanced	Progressive	Selects the image signal input method.	Film/Auto
Video	Black Level	Changes signal black level around a white level setting. (p.21) • OFF This lets you adjust the black level of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	0
	White Level	Adjusts the white level of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	0
	Sharpness	Adjusts the sharpness of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	0
	Contrast	Adjusts the contrast of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	0
	Gamma	Adjusts the gamma of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	0
	Color Mode	Adjusts the color mode of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Color Temp	Adjusts the color temperature of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Video Signal	Adjusts the video signal of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Tracking	Adjusts the tracking of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reduction	Adjusts the reduction of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto
	Reset Lamp	Resets the lamp. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Reset Lamp Timer	Resets the lamp timer. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Execute
	Video Source	Adjusts the video source of the image. When set to "Auto", the black & white extension function operates. • Video Turns off the Film/Edge function.	Auto

- The "Flesh Tone" setting adjusts the green component of image signals. If adjusted to the - side, the green component is reduced and colors appear purplish. If adjusted to the + side, the green component is increased. Adjust until the desired flesh tones are obtained.

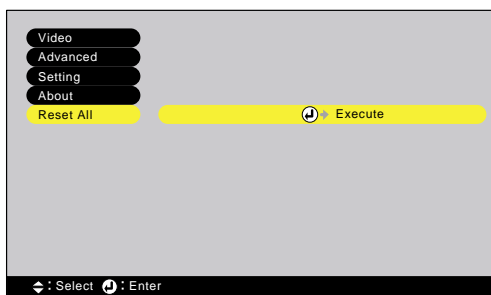
Computer (D-RGB/A-RGB DVI-I, InputB (A-RGB))

Computer



Main menu	Sub-menu	Function	Default setting
About	Lamp	Displays the cumulative lamp operating time. When the lamp warning period is reached, the display characters appear in red.	0H
	Reset Lamp Timer	Initializes the lamp operating time when the lamp is replaced. When this command is selected, the cumulative lamp operating time is reset to the initial default value.	-
	Video Source	Displays the image source which is currently being projected.	Depends on connection
	Input Signal	Displays the input signal settings.	-
	Frequency	Displays the horizontal scanning frequency.	-
	SYNC Polarity	Displays the <u>synchronization</u> polarity.	-
	SYNC Mode	Displays the synchronization attributes.	-
	Resolution	Displays the input resolution.	-
	<u>Refresh Rate</u>	Displays the refresh rate.	-

Reset All Menu



Main menu	Sub-menu	Function	Default setting
Reset All	Execute	Resets all items in all environment setting menus to their default settings. <ul style="list-style-type: none"> Press the [Select] on either the projector's control panel or the remote control to display the confirmation screen, and select "Yes". To return the settings for items in menus such as the "Video" and "Advanced" menu to the default settings, select "Reset" in the respective sub-menus. The Lamp and Language settings will not return to their default settings. 	-

Troubleshooting

This chapter describes troubleshooting procedures for the projector.

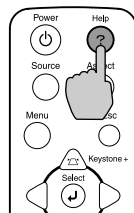
Using the Help	34
When Having Some Trouble	35
When the Indicators Provide No Help	37

Using the Help

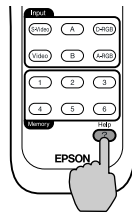
If a problem occurs with the projector, the Help function uses on-screen displays to assist you in solving the problem. It uses a series of menus in a question and answer format. The questions vary depending on the type of video source.

Procedure

1



Projector

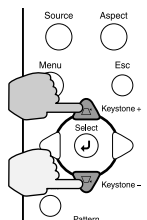


Remote control

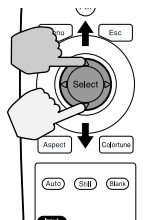
Press the [Help] button on either the remote control or the projector's control panel.

The Help menu will be displayed.

2





Projector

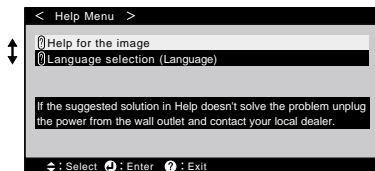


Remote control

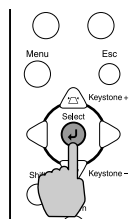
Select a menu item.

If using the projector's control panel, press the  and  buttons.

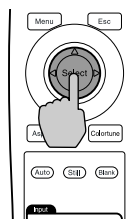
If using the remote control, tilt the [Select] button up and down.



3



Projector



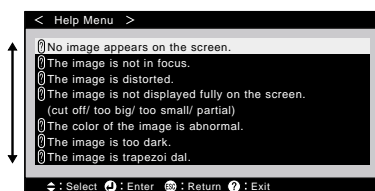
Remote control

Confirm the selection.

Press the [Select] on either the projector's control panel or the remote control to confirm the selection.

The sub-menu appears.

4



Repeat the operations in steps 2 and 3 to proceed through the menu to more detailed items.

To return to the previous menu, press the [Esc] button on either the remote control or the projector's control panel.

You can exit the Help menu at any time by pressing the [Help] button on either the projector's control panel or the remote control.

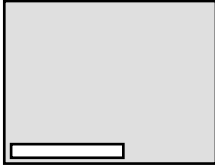


If the Help function does not provide a solution to the problem, refer to "When Having Some Trouble" (p.35) or "When the Indicators Provide No Help" (p.37).

Indicator status	Projector status	Problem and remedy	Reference page
<p>Red Red</p> <p>● ●</p> <p>⬇ ⬇</p>	High temperature inside projector (overheating)	<p>The lamp will turn off automatically and projection will stop. Wait for about 5 minutes without operating the projector. After 5 minutes have elapsed, the projector's cooling fan will stop. When the cooling fan stops, turn off the main power switch and then turn it back on again.</p> <p>If the projector overheats, check the following two points.</p> <ul style="list-style-type: none"> ● Is the setting-up location well ventilated? Check that the air inlet and air outlet are clear, and that the projector is not positioned against a wall. ● Is the air filter blocked with dust? If the air filter is dirty, it should be cleaned. <p>When the main power switch is turned back on, the projector will return to its previous state, so press the [Power] button on either the remote control or the projector's control panel to turn it back on. If the projector continues to overheat even after the above points have been checked, or if the indicators show a problem when the power is turned back on, stop using the projector, turn off the main power switch, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in <i>Safety Instructions/World-Wide Warranty Terms</i> included in the package.</p>	Setup Guide p.44
<p>Orange</p> <p>● ●</p> <p>⬇ ⬇</p>	High-speed cooling in progress	<p>(This is not an abnormality, but if the temperature rises too high again, projection will stop automatically.)</p> <ul style="list-style-type: none"> ● Set the projector up in a place which is well-ventilated, and so that the air inlet and exhaust vents are clear. ● Clean the air filter. <p>* The appearance of the ⬇ indicator at this time will vary depending on the status of the projector.</p>	Setup Guide p.44
<p>Orange</p> <p>● ●</p> <p>⬇ ⬇</p>	Lamp will soon need to be replaced.	<p>(No abnormality)</p> <p>Have a new replacement lamp ready.</p> <p>The lamp service life can become shorter than normal as a result of the usage conditions, and so the lamp should be replaced as soon as possible.</p> <p>* The appearance of the ⬇ indicator at this time will vary depending on the status of the projector.</p>	p.45
<p>Orange</p> <p>● ●</p> <p>⬇ ⬇</p>	Standby condition	<p>(No abnormality)</p> <p>Projection starts when the [Power] button on either the remote control or the projector's control panel is pressed.</p>	p.6
<p>Green</p> <p>● ●</p> <p>⬇ ⬇</p>	Warm-up in progress	<p>(No abnormality)</p> <p>Wait for a short while. The indicator will stop flashing and light with a green color.</p>	p.7
<p>Green</p> <p>● ●</p> <p>⬇ ⬇</p>	Projecting in progress	<p>(No abnormality)</p>	p.7
<p>Orange</p> <p>● ●</p> <p>⬇ ⬇</p>	Cool-down in progress	<p>(No abnormality)</p> <ul style="list-style-type: none"> ● Wait for a short while. The <u>cool-down</u> (lamp cooling operation) period lasts for about 2 minutes. The actual time will vary depending on factors such as the ambient air temperature. ● The [Power] button on either the remote control or the projector's control panel will not operate during the cool-down period. When cool-down is complete, the indicator will stop flashing and light orange. You can then use the [Power] button. ● If the main power switch at the rear of the projector is turned off before cool-down is complete, wait for the lamp to cool down (normally about one hour is required) before turning the power back on again. 	p.8

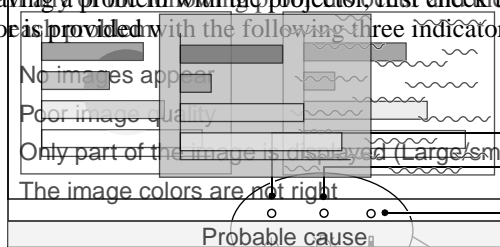


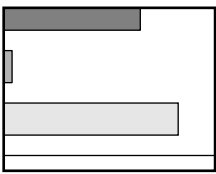
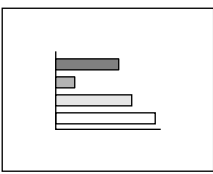
- If the projector is not operating properly even though the indicators are all showing normal, refer to "When the Indicators Provide No Help" on the following page.
- If an indicator is showing a status which does not appear in the previous tables, contact your dealer or the nearest address provided at "International Warranty Conditions" in *Safety Instructions/World-Wide Warranty Terms* included in the package.

<div>  </div>		<p>Condition</p> <p>No images appear (Messages do appear) “Not Supported.” message appears on the screen. “No-Signal.”message appear on the screen.</p>
Probable cause		Remedy
Does the input signal setting match the connected source?		<p>➔ Use the “Video Signal”, “Input A” or “Input B” commands in the “Advanced” menu to select the signal format that matches the connected source. “Advanced” - “Video Signal”, “Input A”, “Input B” (p.29)</p>
Has the correct image input port been selected?		<p>➔ Press the [Source] button on the projector's control panel (or the [D-RGB], [A], [B], [Video] or [S-Video] button on the remote control) to change the image source. (p.7)</p>
Is the power for the computer or video source turned on?		<p>➔ Turn on the power. (p.7)</p>
Check the mode which corresponds to the frequency of the image signals being output from the computer.		<p>➔ Refer to the documentation provided with your computer for details on changing the resolution and frequency of the image signals being output from the computer. (p.50)</p>
If a laptop computer or a computer with a LCD screen has been connected to the projector, it is necessary to output the image signals to the projector rather than to the screen.		<p>➔ Normally image signals are output to only the computer's LCD screen, so you need to change the output to an external destination. For some computer models, when the image signals are output externally, they no longer appear on the LCD screen. For details, refer to the section of the documentation provided with your computer under a heading such as "External output", "Connecting an external monitor" or similar. (p.7)</p>

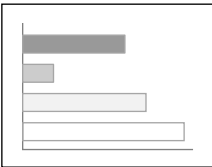
When Having Some Trouble No Help


If you are having a problem with the projector, first check the projector's indicators. The projector is provided with the following three indicators. These indicators alert you to problems with projector operation.

	<p>Condition</p> <p>No images appear</p> <p>Poor image quality</p> <p>Only part of the image is displayed (Large/small)</p> <p>The image colors are not right</p> <p>Probable cause</p> <p>• The image is dark</p> <p>• The image is fuzzy</p> <p>• The image is out of focus</p> <p>• The image is distorted</p> <p>• The image contains interference</p> <p>Remedy</p> <p>• Replace the lamp with a new one. (p.46, 47)</p> <p>• Adjust the focus. (p.13)</p> <p>• Adjust the projection angle. (p.10)</p>
<p>Is the lamp due for replacement?</p> <p>Has the focus been adjusted correctly?</p> <p>Has the front adjustable feet been adjusted so that the projection angle is top big?</p> <p>The following tables show what the indicators mean and how to remedy problems that they indicate.</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>Is the lamp due for replacement?</p> <p>Has the focus been adjusted correctly?</p> <p>Has the front adjustable feet been adjusted so that the projection angle is top big?</p> <p>Remedy</p> <p>• Replace the lamp with a new one. (p.46, 47)</p> <p>• Adjust the focus. (p.13)</p> <p>• Adjust the projection angle. (p.10)</p>
<p>Is the projector at the correct distance?</p> <p>Is the lens cover still attached?</p> <p>Is the power cord disconnected?</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>The recommended distance from the projector to the screen is within 0.9 - 13 m (2.9 - 42.6 ft).</p> <p>Image appears greenish when the projection distance is within this range. (Setup Guide)</p> <p>Stop using the projector, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package.</p> <p>Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>Turn on the main power switch at the rear of the package.</p> <p>Clean the lens. (p.44)</p> <p>Remedy</p> <p>• Set up the projection distance.</p> <p>• Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>• Turn on the main power switch at the rear of the package.</p> <p>• Clean the lens. (p.44)</p>
<p>Was the warranty seal broken when straight</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>Stop using the projector, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package.</p> <p>Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>Turn on the main power switch at the rear of the package.</p> <p>Clean the lens. (p.44)</p> <p>Remedy</p> <p>• Set up the projection distance.</p> <p>• Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>• Turn on the main power switch at the rear of the package.</p> <p>• Clean the lens. (p.44)</p>
<p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>Stop using the projector, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package.</p> <p>Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>Turn on the main power switch at the rear of the package.</p> <p>Clean the lens. (p.44)</p> <p>Remedy</p> <p>• Set up the projection distance.</p> <p>• Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>• Turn on the main power switch at the rear of the package.</p> <p>• Clean the lens. (p.44)</p>
<p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>Stop using the projector, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package.</p> <p>Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>Turn on the main power switch at the rear of the package.</p> <p>Clean the lens. (p.44)</p> <p>Remedy</p> <p>• Set up the projection distance.</p> <p>• Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>• Turn on the main power switch at the rear of the package.</p> <p>• Clean the lens. (p.44)</p>
<p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>Stop using the projector, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package.</p> <p>Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>Turn on the main power switch at the rear of the package.</p> <p>Clean the lens. (p.44)</p> <p>Remedy</p> <p>• Set up the projection distance.</p> <p>• Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>• Turn on the main power switch at the rear of the package.</p> <p>• Clean the lens. (p.44)</p>
<p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p> <p>Is the projector beam perpendicular to the screen?</p> <p>Is the main power switch turned off?</p> <p>Is the lens dirty?</p>	<p>Condition</p> <p>• lit</p> <p>• flashing</p> <p>• off</p> <p>Probable cause</p> <p>Stop using the projector, disconnect the power cord from the electrical outlet, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package.</p> <p>Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>Turn on the main power switch at the rear of the package.</p> <p>Clean the lens. (p.44)</p> <p>Remedy</p> <p>• Set up the projection distance.</p> <p>• Adjust your projector to the screen and the projector beam is perpendicular to the screen.</p> <p>• Turn on the main power switch at the rear of the package.</p> <p>• Clean the lens. (p.44)</p>

		<p>Condition</p> <ul style="list-style-type: none"> • Image is too large (Only part of the image is displayed) • Image is too small
---	---	---

Probable cause	Remedy
The display mode (<u>aspect ratio</u>) setting may not be selected correctly.	➔ Press the [Aspect] button on either the remote control or the projector's control panel. (p.14)
Has the "Position" setting been adjusted correctly?	➔ Use the "Position" command in the "Advanced" menu to adjust. (p.29)
Has the correct resolution been selected?	➔ Set the computer so that the signals that are output are compatible with this projector. Refer to the documentation provided with your computer for details on changing the settings. (p.50)
Change the resolution for the laptop computer or computer with a LCD screen.	➔ Change the resolution so that the image is displayed in the whole of the projection area, or set the image signal to external output only. (p.7)
Has the computer been set for dual display?	➔ If dual display has been activated in the "Display Properties" of the computer's "Control Panel", the projector will only project about half of the image on the computer screen. To display the whole of the image on the computer screen, turn off the dual display setting. Refer to the video driver manual for the computer's monitor for further details.

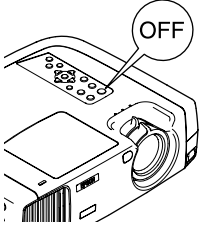




	<p>Condition</p> <p>The image colors are not right</p>
---	--

Probable cause	Remedy
Are the cables connected correctly?	➔ Check that all cables that are required for projection are connected correctly. (Setup Guide)
Has the image <u>contrast</u> been adjusted correctly?	➔ Use the "White Level" command in the "Video" menu to adjust the contrast. "Video" - "White Level" (p.25, 27)
Has the color been adjusted correctly?	➔ Use the "Color Adjustment" command in the "Video" menu to adjust the contrast. "Video" - "Color Adjustment" (p.26, 28)
<p>Have the color intensity and tint been adjusted correctly?</p> <p>(The colors may not exactly match the colors in the image on the computer screen or LCD screen, but this is normal and is not the sign of a problem.)</p>	➔ Use the "Video" menu to adjust the "Color" and "Tint" settings "Video" - "Color", "Tint" (p.25)
<p>Is the lamp due for replacement?</p> <p>If the  indicator is flashing orange, it means that the lamp will soon be due for replacement. When the lamp is nearly due for replacement, the image will become darker and the tint will become poorer.</p>	➔ Replace the lamp with a new one. (p.46, 47)
Does the input signal setting match the connected source?	➔ Use the "Video Signal", "Input A" or "Input B" commands in the "Advanced" menu to select the signal format that matches the connected source. "Advanced" - "Video Signal", "Input A", "Input B" (p.29)

When Having Some Trouble No Help

If you are having a problem with the projector, first check the projector's indicators. The projector is provided with the following three indicators. These indicators alert you to problems with projector operation.

	<p>Probable cause</p> <p>Remedy</p>
<p>Is the lamp due for replacement?</p>	<p>Condition → Replace the lamp with a new one. (p.46, 47)</p>
<p>Has the focus been adjusted correctly?</p>	<p>Condition → Adjust the focus. (p.13)</p>
<p>Has the front adjustable feet been adjusted so that the projection angle is top big?</p>	<p>Condition → Adjust the projection angle. (p.10)</p>
<p>The following tables show what the indicators mean and how to remedy problems that they indicate.</p>	
<p>Is the projector at the correct distance?</p>	<p>Condition → The recommended distance from the projector to the screen is within 0.9 - 13 m (2.9 - 42.6 ft). Set up the screen.</p>
<p>Is the lens cover still attached?</p>	<p>Condition → Image appears greenish. The projection distance is within this range. (Setup Guide)</p>
<p>Is the power cord disconnected?</p>	<p>Condition → Stop using the projector, disconnect the power cord from the power inlet of the projector, and connect it to the nearest electrical outlet.</p>
<p>Is the projector beam perpendicular to the screen?</p>	<p>Condition → Adjust the projector so that the projector beam is perpendicular to the screen.</p>
<p>Is the main power switch turned off?</p>	<p>Condition → Turn on the main power switch at the rear of the package. (p.44)</p>
<p>Is the lens dirty?</p>	<p>Condition → Clean the lens. (p.44)</p>
<p>Was the warranty problem sensor lamp problem sensor?</p>	<p>Condition → Stop using the projector, disconnect the power cord from the projector, and contact your dealer or the nearest address provided at "International Warranty Conditions" in the Instructions/World-Wide Warranty Terms included in the package. (p.44)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>
<p>Is the projector displaying a red light?</p>	<p>Condition → The projector is in sleep mode. (p.46)</p>

		Condition The power does not turn off (after the [Power] button is pressed)	
Probable cause		Remedy	
Is the  indicator still orange? This projector is designed so that the  indicator remains lit even when after the power has been turned off.		➔ When the main power switch at the rear of the projector is turned off, the  indicator switches off.	
Is the fan still operating? After the [Power] button on either the remote control or the projector's control panel is pressed to turn off the power, the <u>cool-down</u> ➔ period starts.		➔ After the cool-down period is complete, the  indicator changes to a steady orange, and you can then turn off the main power switch at the rear of the projector. * The cool-down period lasts for about 2 minutes. The actual time will vary depending on factors such as the ambient air temperature.	

Appendices

This chapter provides information on maintenance procedures to ensure the best level of performance for the projector for a long time.

Maintenance	44
• Cleaning.....	44
• Cleaning the Projector Case.....	44
• Cleaning the Lens	44
• Cleaning the Air Filter	44
• Replacing Consumables	45
• Lamp Replacement Period.....	45
• Replacing the Lamp	46
• Resetting the Lamp Operating Time.....	47
• Replacing the Air Filter	48
Optional Accessories	49
List of Supported Signal Resolutions	50
• Component Video Input.....	50
• Composite Video/S-Video Input.....	50
• RGB Input.....	51
Specifications.....	52
Appearance	54
Part Names and Functions.....	55
• Front/Top.....	55
• Control Panel	56
• Rear.....	57
• Base	57
• Remote Control.....	58
Glossary	59
Index.....	61

Maintenance

This section describes maintenance tasks such as cleaning the projector and replacing consumable parts.

Cleaning

You should clean the projector if it becomes dirty or if the quality of projected images starts to deteriorate.



Be sure to read the separate *Safety Instructions/World-Wide Warranty Terms* for details on safe handling of the projector during cleaning.

Cleaning the Projector Case

Clean the projector case by wiping it gently with a soft cloth.

If the projector is particularly dirty, moisten the cloth with water containing a small amount of neutral detergent, and then firmly wring the cloth dry before using it to wipe the projector case. Then wipe the case again with a soft, dry cloth.



Do not use volatile substances such as wax, alcohol or thinner to clean the projector case. These can cause the case to warp and make the coating finish peel off.

Cleaning the Lens

Use a commercially-available air blower, or use a lens cleaning paper to gently wipe the lens.

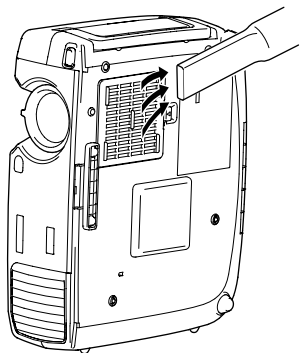


Do not rub the lens with harsh materials or subject the lens to shocks, as it can easily become damaged.

Cleaning the Air Filter

If the air filter becomes clogged with dust, it can cause overheating and damage the projector.

Stand up the projector in order to prevent dust getting inside the projector, and then use a vacuum cleaner to clean away the dust from the air filter.



- If the air filter is difficult to clean or if it is broken, it should be replaced. Contact your dealer for a spare air filter.
- Replacement lamps are provided with a spare air filter. The air filter should also be replaced when the lamp is replaced.

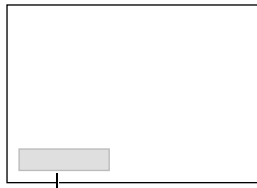
Replacing Consumables

This section describes how to replace the lamp and the air filter.

Lamp Replacement Period


It is time to replace the lamp when:

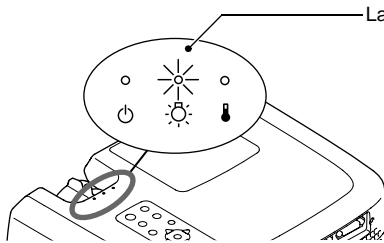
- The message "Lamp Replace" appears on the screen when projection starts.



A message will be displayed.

The message appears for 30 seconds, and disappears again after 30 seconds have passed.

- The  indicator flashes orange or lights red.



Lamp indicator flashes orange or lights red.

- The projected image gets darker or starts to deteriorate.



- In order to maintain the brightness and quality of the projected images, replace the lamp as soon as possible after the warning message appears.
- The replacement warning message is set to appear after 2900 hours of lamp use in order to maintain the brightness and quality of the projected images. If you continue to use the lamp after this period, the possibility of the lamp breaking becomes greater. When the lamp replacement message appears, replace the lamp with a new one as soon as possible, even if it is still working.
- The warning message appears after 2900 hours of use, but the actual life of each individual lamp will vary depending on the characteristics of the lamp and on the way it has been used. Some lamps may stop operating before 2900 hours of use, so you should always have a spare lamp ready in case.
- When the lamp replacement warning message appears, the user's logo will not appear even if the "Start-up screen" setting is "ON".
- Contact your dealer for a spare lamp.

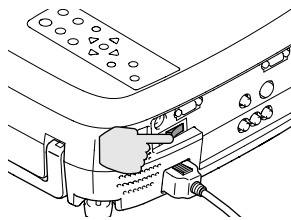
Replacing the Lamp



- If the lamp stops working and needs to be replaced, there is the danger that the lamp may break when handled. If replacing the lamp of a projector which has been installed to the ceiling, you should remove the projector from the ceiling before replacing the lamp. If the projector cannot be removed from the ceiling, you should always assume that the lamp is broken and handle it with extreme care during removal. Furthermore, you should stand to the side of the projector, not underneath it.
- Wait until the lamp has cooled down sufficiently before opening the lamp cover. After the cool-down period has finished, it takes approximately a further 30 minutes for the lamp to be cool enough.

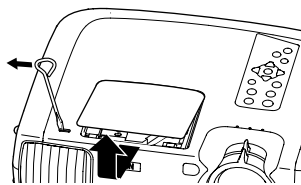
Procedure

1



Turn off the main power switch at the rear of the projector. (p.8)

2

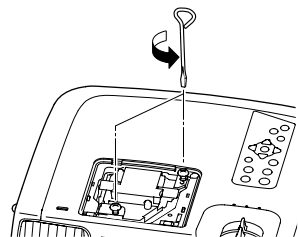


Wait until the lamp has cooled down, and then remove the lamp cover.

After the cool-down period has finished, it takes approximately a further 30 minutes for the lamp to be cool enough.

Use the screwdriver that is provided with the replacement lamp to slide the lamp cover opening switch so that the lamp cover lifts up. Hold the raised section of the lamp cover and then slide it forward to remove it from the projector.

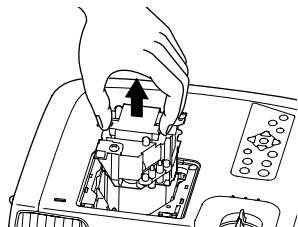
3



Loosen the two lamp fixing screws.

Use the screwdriver that is supplied with the replacement lamp to loosen the two lamp fixing screws that are securing the lamp to the projector.

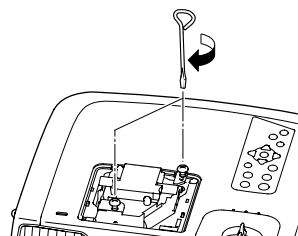
4



Take out the lamp.

Hold the lamp by the two recesses on the side to lift it up and out from the projector.

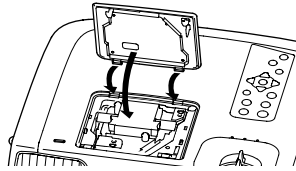
5



Install the new lamp.

Hold the lamp so that it faces the correct way to fit into the projector, and then insert the lamp until it clicks into place and tighten the two fixing screws.

6

**Install the lamp cover.**

Insert the two cover tabs into the projector, and then press the other side of the lamp cover until it clicks into place.



- Install the lamp securely. If the lamp cover is removed, the lamp turns off automatically as a safety precaution. Moreover, the lamp will not turn on if the lamp or the lamp cover is not installed correctly.
- Replacement lamps are provided with a spare air filter. The air filter should also be replaced when the lamp is replaced.
- Dispose of used lamps properly in accordance with your local regulations.

Resetting the Lamp Operating Time

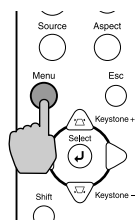
The projector has a built-in counter which keeps track of the lamp operating time. When the cumulative operating time reaches a certain point, it causes the replacement warning message to be displayed. Therefore, the counter needs to be reset after the lamp has been replaced with a new one. You can do this using the projector menu.



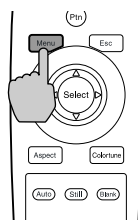
Do not reset the lamp operating time except after the lamp has been replaced, otherwise the lamp replacement period will not be indicated correctly.

Procedure

1



Projector



Remote control

Press the [Menu] button on either the remote control or the projector's control panel.

The environment setting menu will be displayed.

2

Lamp	: 2900H
Reset Lamp Timer	⏮ ➡ Execute
Video Source	:
Video Signal	:

Select “Reset Lamp Timer” from the “About” menu.

Press the [Select] on either the projector's control panel or the remote control.

3

Reset Lamp Timer
Execute?
Yes No

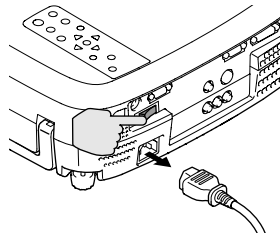
Reset the lamp operating time.

Select “Yes”, and then press the [Select] on either the projector's control panel or the remote control.

Replacing the Air Filter

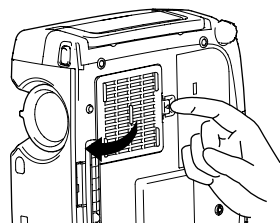
Procedure

1



Turn off the power switch at the rear of the projector, and then disconnect the power cord. (p.8)

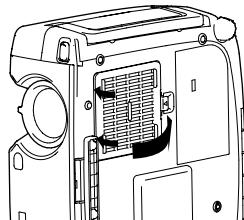
2



Put your finger into the recess in the air filter hook, and lift up the air filter to remove it.

In order to prevent any dust on the air filter from getting into the projector, be sure to stand up the projector so that the handle is at the top.

3



Install the new air filter.

First insert the tabs, and then press down on the opposite side until it clicks into place.



Dispose of used air filters properly in accordance with your local regulations.

Composite Video/S-Video Input

Handle	35	Reset All menu	32
--------------	----	----------------------	----

Appendices

List of Supported Signal Resolutions

Component Video Input

Units: dots

Signal	Resolution	Aspect				
		Normal (Default)	Squeeze	Zoom	Through	Squeeze Through
<u>SDTV</u> (525i, 60Hz)	640 × 480 640 × 360 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
SDTV (625i, 50Hz)	768 × 576 768 × 432 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)
SDTV (525p)	640 × 480 640 × 360 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
SDTV (625p)	768 × 576 768 × 432 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)
<u>HDTV</u> (750p) 16:9	1280 × 720	1280 × 720 (16:9 aspect)	–	–	1178 × 664 (16:9 aspect)	–
HDTV(1125p)16:9	1920 × 1080	1280 × 720 (16:9 aspect)	–	–	886 × 498 (16:9 aspect)	–

Composite Video/S-Video Input

Units: dots

Signal	Resolution	Aspect				
		Normal (Default)	Squeeze	Zoom	Through	Squeeze Through
TV (NTSC)	640 × 480 640 × 360 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
TV (PAL, SECAM)	768 × 576 768 × 432 (When zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)

Specifications

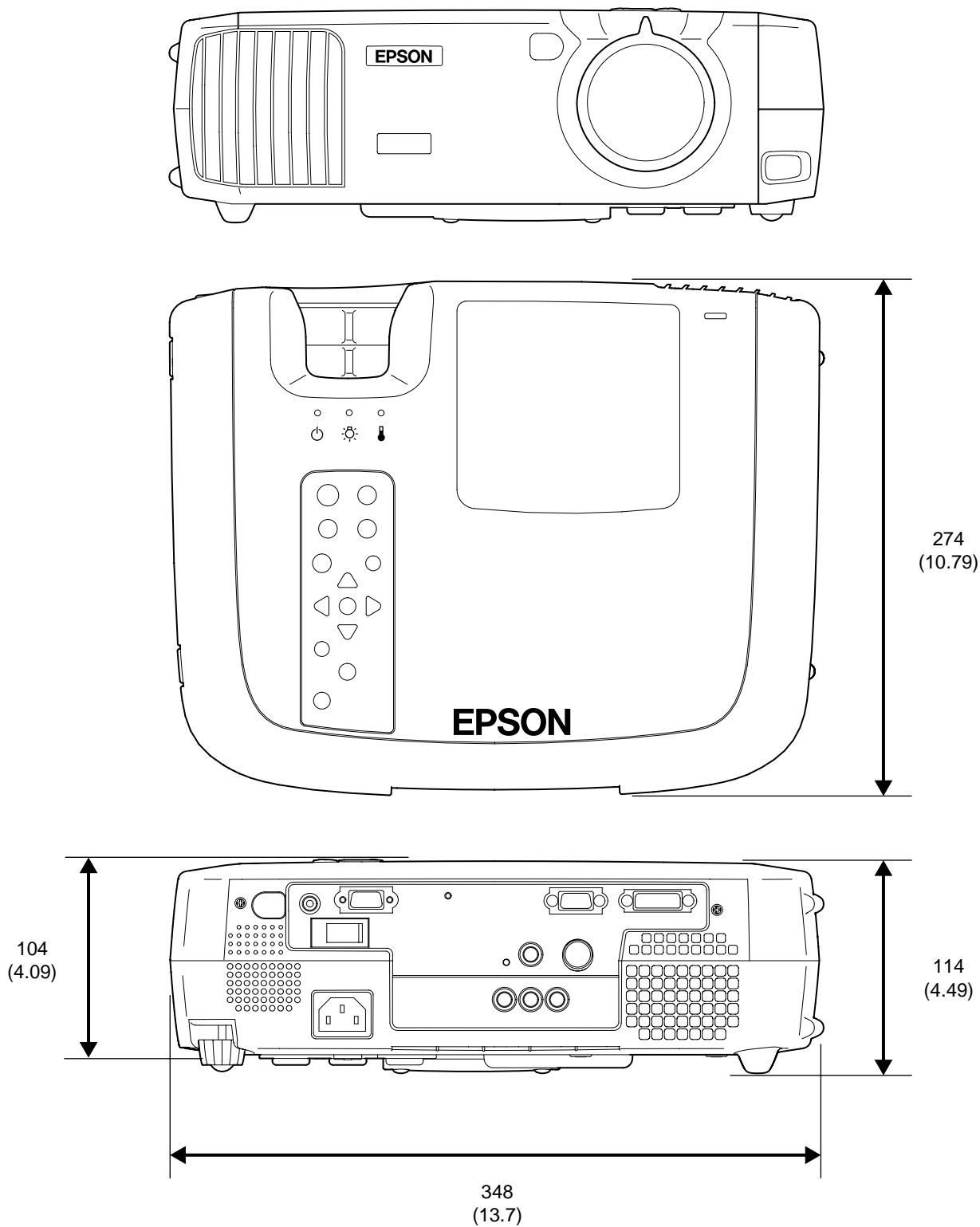
Product name	EMP-TW100 multimedia projector		
Dimensions	348 (W) x 104 (H) x 274 (D) mm (13.7 (W) x 4.09 (H) x 10.79 (D) inches) (not including protruding parts)		
Panel size	0.87 inches		
Display method	Polysilicon TFT active matrix		
Drive method	Full-line 12-phase block sequential writing		
Resolution	921,600 pixels (1280 (W) x 720 (H) dots) x 3		
Focus adjustment	Manual		
Zoom adjustment	Manual (approx. 1:1.35)		
Lamp (light source)	UHE lamp, 150 W, Model No.: ELPLP17		
Power supply	100 – 120 VAC, 2.7A 200 – 240 VAC, 1.3A 50/60 Hz		
Operating temperature	+5°C – +35°C (41°F - 95°F) (No condensation)		
Storage temperature	-10°C – +60°C (14°F - 140°F) (No condensation)		
Weight	Approx. 4.2 kg (9.3 lbs)		
Connectors	A-RGB/D-RGB	DVI-I	1
	InputA	3RCA pin jack	1
	InputB	Mini D-Sub 15-pin (female)	1
	Video	RCA pin jack	1
	S-Video	Mini DIN 4-pin	1
	RS-232C	D-Sub 9-pin (male)	1
	Trigger	3.5 mm mini jack	1

Composite Video/S-Video Input

Handle	35	Reset All menu	32
--------------	----	----------------------	----

Appendices

Appearance

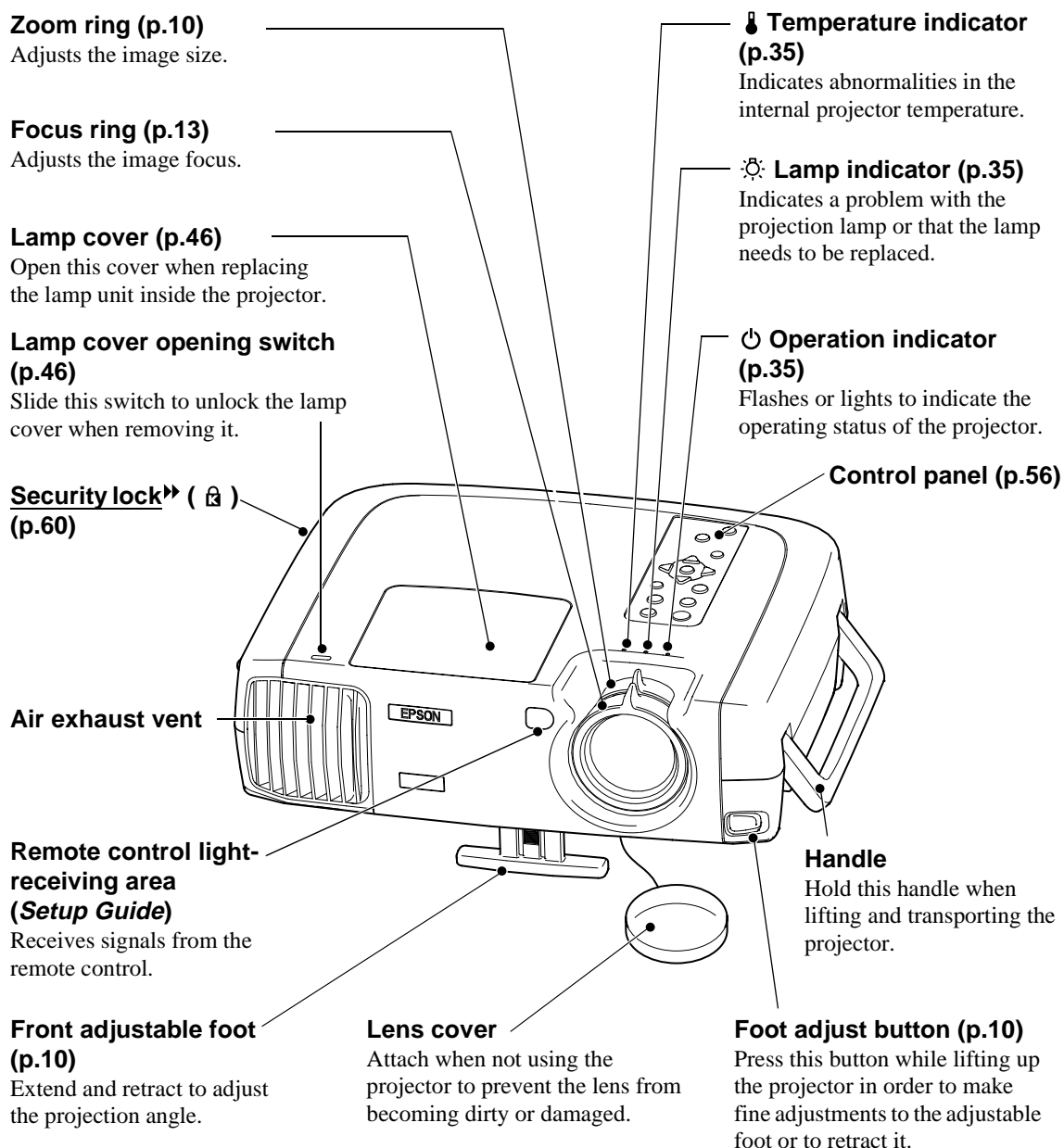


Units: mm (inch)

Part Names and Functions

Front/Top Rear Remote control
Control panel Base

Front/Top



Control Panel

[Power] button (p.7)

Press to turn the projector power on and off.

[Source] button (p.7)

Switches the input source between InputA → InputB → S-Video → Video → D-RGB → A-RGB each time the button is pressed.

[Menu] button (p.18)

The environment setting menus turn on and off each time the [Menu] button is pressed.

[Keystone] buttons (p.11)

Press to select an item in an environment setting menu or help menu.
Press and hold the [Shift] button while pressing these buttons to correct keystone distortion of images.

[Shift] button (p.11)

This button does not function by itself. Press and hold this button while pressing the [Keystone +] button or the [Keystone -] button to correct keystone distortion of images.

[Colortune] button (p.13)

Switches the color mode between Dynamic → Theatre → Natural → PC → sRGB each time the button is pressed.

[Help] button (p.34)

Displays the online help menu to assist you if you have a problem

[Aspect] button (p.14)

Selects the aspect ratio for projected images from one of five settings.
The aspect ratio switches between Normal → Squeeze → Zoom → Through → Squeeze Through each time the button is pressed.

[Esc] button (p.19, 34)

Pressing [Esc] while viewing an environment setting menu or the online help displays the previous screen or menu.

[Select] button (p.18, 20, 34)

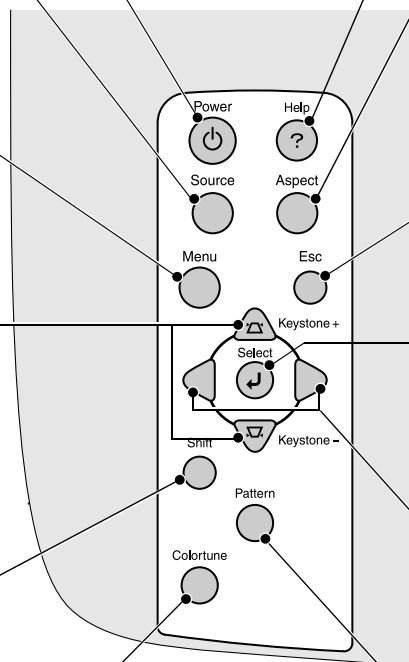
Displays the line menu.
Pressing the [Select] button while viewing an environment setting menu or the online help selects the menu item and proceeds to the next display.

◁ and ▷ buttons (p.20)

These buttons select adjustment values in environment setting menus and the online help.

[Pattern] button (p.12)

Projects a test pattern for image adjustment.
The test pattern switches between Crosshatch → Grayscale Pattern → Off each time the button is pressed.



Rear

Trigger port

When the projector power is turned on, 12 V DC is output from this port. When the projector's power is turned off, the output becomes 0 V to communicate the projector's power ON/OFF status to an external device.

Remote control light-receiving area (Setup Guide)

Receives signals from the remote control.

Main power switch (p.6)

Press to turn the main projector's power on and off. When the power is off, the power consumption is 0 W.

Rear adjustable foot

Extend and retract to adjust the horizontal projection angle.

Power inlet (p.6)

Connects the power cord.

Video port (Setup Guide)

Inputs composite video signals to the projector from other video sources.

RS-232C port

Connects the projector to a computer using an RS-232C cable. This port is for service use, and should not normally be used.

InputB port (Setup Guide)

Inputs analog RGB video signals from a computer and component video signals from other video sources.

A-RGB/D-RGB DVI-I port (Setup Guide)

Inputs digital/analog RGB video signals from a computer.

S-Video port (Setup Guide)

Inputs an S-Video signal to the projector from other video sources.

InputA port (Setup Guide)

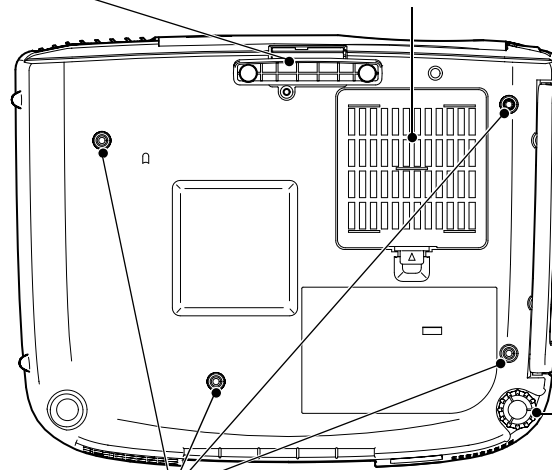
Inputs component video signals from other video sources.

Base

Front adjustable foot

Air filter (air inlet) (p.44, 48)

Prevents dust and other foreign particles from being drawn into the projector. When replacing the lamp, replace the air filter also.



Rear adjustable foot

Suspension bracket fixing points (4 points) (p.49, Setup Guide)

Install the optional ceiling mount here when suspending the projector from the ceiling.

Remote Control

(Illumination) button (Setup Guide)

The [Power], [Pattern], [Menu], [Esc], [Aspect] and [Colortune] buttons illuminate for 10 seconds each time this button is pressed.

[Menu] button (p.18)

The environment setting menus turn on and off each time the [Menu] button is pressed.

[Aspect] button (p.14)

Selects the aspect ratio for projected images from one of five settings.

The aspect ratio switches between Normal → Squeeze → Zoom → Through → Squeeze Through each time the button is pressed.

[Auto] button (p.16)

Automatically adjusts computer images to the optimum images.

[Still] button

Screen image playback pauses and resumes each time the [Still] button is pressed. However, the video and audio playback still continues while moving images are paused, so image playback will not resume exactly from the point where playback was paused.

[Input] button (p.7)

- [S-Video] : Changes video input to the source connected to the S-Video port.
- [Video] : Changes video input to the source connected to the Video port.
- [A] : Changes video input to the source connected to the InputA port.
- [B] : Changes video input to the source connected to the InputB port.
- [D-RGB] : Changes video input to the source connected to the D-RGB port.
- [A-RGB] : Changes video input to the source connected to the A-RGB port.

Remote control light-emitting area (Setup Guide)

Outputs infrared remote control signals.

[Pattern] button (p.12)

Projects a test pattern for image adjustment.

The test pattern switches between Crosshatch → Grayscale Pattern → Off each time the button is pressed.

[Power] button (p.7)

Press to turn the projector power on and off.

[Esc] button (p.19, 34)

Pressing [Esc] while viewing an environment setting menu or the online help displays the previous screen or menu.

[Select] button (p.18, 20, 34)

Press to display the line menu.

When viewing an environment setting menu or the online help, tilt the [Select] button up, down or to the left and right to select menu items, and press the [Select] button to select the menu item and proceed to the next display.

[Colortune] button (p.13)

Switches the color mode between Dynamic → Theatre → Natural → PC → sRGB each time the button is pressed.

[Blank] button (p.30)

The projected images and audio switch off and on each time the [Blank] button is pressed.

When the images and audio are switched off, the screen will appear in accordance with the setting made using the "Blank" command in the "Settings" menu.

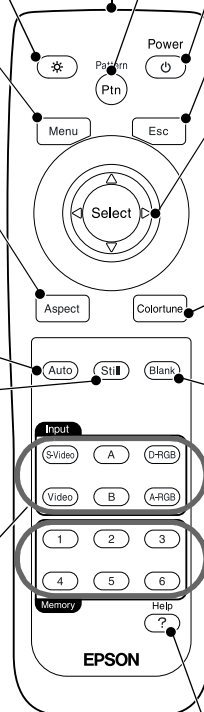
However, the video and audio playback still continues while moving images are paused, so image playback will not resume exactly from the point where playback was paused.

[Memory] buttons (p.22)

Retrieves settings that have been saved using the "Memory" command in the "Video" menu and adjusts the images being projected.

[Help] button (p.34)

Displays the online help menu to assist you if you have a problem.



Glossary



Following is an explanation of some of the terms used in this guide which may be unfamiliar or which were not explained in the manual itself. Further information can be obtained by referring to other commercially-available publications.

3-2 pull-down function	This function directly converts image sources that have been recorded in the same 24-frame format used for movies into 60-frame progressive signals. This allows data such as DVD software that has been recorded in 24-frame format to be played back on large screens with more natural and accurate reproduction, without any loss of image quality from the original movie.
Aspect ratio	The ratio between an image's length and its height. HDTV images have an aspect ratio of 16:9 and appear elongated. The aspect ratio for standard images is 4:3.
Black & white extension function	A function that accentuates differences in color gradations (darkness and lightness of colors) even for images that are very dark or very bright, to make them easier to view.
Color difference signal (component)	A type of video signal output by video equipment which actually consists of three separate signals: a red + luminance signal (R-Y), a luminance signal (Y) and a blue + luminance signal (B-Y). Each signal is transmitted along a separate cable. Color difference signals generally result in a better image than composite signals (in which the red, green and blue signals and the luminance signal are all transmitted along a single cable).
Color temperature	The temperature of an object which is emitting light. If the color temperature is high, the colors tend to take on a bluish tinge. If the color temperature is lower, the colors tend to take on a reddish tinge.
Component video	Video signals which have the video brightness signals and color signals separated, in order to provide better image quality. In high-definition TV (HDTV), it refers to images which consist of three independent signals: Y (luminance signal), and Pb and Pr (color difference signals).
Composite video	Video signals which have the video brightness signals and color signals mixed together. The type of signals commonly used by household video equipment (NTSC format). The signals consist of the carrier signal Y (luminance signal) and the chroma (color) signal which are contained in the color bar signal.
Contrast	The relative brightness of the light and dark areas of an image can be increased or decreased in order to make text and graphics stand out more clearly, or to make them appear softer.
Cool-down	The cooling process for the projector lamp continues even after the [Power] button on either the remote control or the projector's control panel has been pressed to turn off the projector. All button operations for the remote control and the projector's control panel are disabled while the cooling fan is operating at this time. The length of time that this is happening is called the "cool-down period". The cool-down period lasts for about 2 minutes. The actual time will vary depending on the external air temperature.
DCDi function	An abbreviation for Directional Correlational Deinterlacing. Refers to a high-resolution image circuit function developed by Faroudja. It incorporates the latest in edge cutting technology to smooth the jaggedness from the edges of images that have been converted from interlaced to progressive video, in order to provide more natural images.
DFP	Abbreviation for Digital Flat Panel. Refers to a standard method for digital transmission of video signals.
Dolby Digital	A proprietary sound format developed by Dolby Laboratories. Normal stereo is a 2-channel format that uses two speakers. Dolby Digital is a 6-channel (5.1 channel) format that adds to this a center speaker, two rear speakers and a sub-woofer.
DVI	Abbreviation for Digital Visual Interface. Refers to a standard method for digital transmission of video signals. DVI is a standard which has also been applied to digital household electronic equipment other than computers. It allows images to be transmitted at higher resolutions than for DFP.
Film judgment function	This function determines whether or not the video source is a 24 Hz progressive film source.
Gain	The adjustment of minute changes in color that occur as result of factors such as differences in the equipment used to display images. It adjusts the coloration in brighter ranges separately for R, G and B components.
Gamma	The adjustment of minute changes in color that occur as result of factors such as differences in the equipment used to display images. It adjusts the coloration in intermediate ranges separately for R, G and B components.

HDTV	An abbreviation for High-Definition Television. It refers to high-definition systems which satisfy the following conditions. <ul style="list-style-type: none"> • Vertical resolution of 750p or 1125i or greater (p = progressive scanning, i = interlaced scanning) • Screen aspect ratio of 16:9 • <u>Dolby Digital</u> audio reception and playback (or output)
Interlaced	A method of image scanning whereby the signal bandwidth used is approximately half that required for sequential scanning when images with the same still picture resolution are broadcast.
Offset	The adjustment of minute changes in color that occur as result of factors such as differences in the equipment used to display images. It adjusts the coloration in darker ranges separately for R, G and B components.
Refresh Rate	The light-emitting element of a display maintains the same luminosity and color for an extremely short time. Because of this, the image must be scanned many times per second in order to refresh the light emitting element. The number of refresh operations per second is called the "refresh rate", and is expressed in hertz (Hz).
S-Video images	A video signal which has the luminance component and color component separated in order to provide better image quality. It refers to images which consist of two independent signals: Y (luminance signal), and C (color signal).
SDTV	An abbreviation for Standard Definition Television. It refers to standard television systems which do not satisfy the conditions for High-Definition Television.
Security lock	A device consisting of a protector case with a hole in it that a commercially-available theft-prevention cable can be passed through in order to secure the device to a table or pillar. This projector is compatible with the Microsaver Security System manufactured by Kensington.
sRGB	An international standard for color intervals that was formulated so that colors which are reproduced by video equipment can be handled easily by computer operating systems (OS) and the Internet.
SVGA	A type of image signal with a resolution of 800 (horizontal) x 600 (vertical) dots which is used by IBM PC/AT-compatible computers (DOS/V computers).
SXGA	A type of image signal with a resolution of 1280 (horizontal) x 1024 (vertical) dots which is used by IBM PC/AT-compatible computers (DOS/V computers).
Synchronization (Sync.)	The signals output from computers have a specific frequency. If the projector frequency does not match this frequency, the resulting images will not be of a good quality. The process of matching the phases of these signals (the relative position of the crests and troughs in the signal) is called "synchronization". If the signals are not synchronized, problems such as flickering, blurriness and horizontal interference can occur.
Tracking	The signals output from computers have a specific frequency. If the projector frequency does not match this frequency, the resulting images will not be of a good quality. The process of matching the frequency of these signals (the number of crests in the signal) is called "tracking". If tracking is not carried out correctly, wide vertical stripes will appear in the projected images.
Three-dimensional Y/C separation	A term given to the reduction in fine image distortion such as stripiness and jaggedness of image contours that can occur as a result of separate digital processing of Y (luminance) and C (chroma) components of image signals.
UXGA	A type of image signal with a resolution of 1600 (horizontal) x 1200 (vertical) dots which is used by IBM PC/AT-compatible computers (DOS/V computers).
VGA	A type of image signal with a resolution of 640 (horizontal) x 480 (vertical) dots which is used by IBM PC/AT-compatible computers (DOS/V computers).
XGA	A type of image signal with a resolution of 1,024 (horizontal) x 768 (vertical) dots which is used by IBM PC/AT-compatible computers (DOS/V computers).
YCbCr	The carrier signal which is contained in the color bar signal used in modern TV transmissions (NTSC format). The name comes from the Y (luminance) signal and the CbCr (chroma [color]) signals.
YPbPr	The carrier signal which is contained in the color bar signal used in high-definition TV (HDTV) transmissions. The name comes from the Y (luminance) signal and the PbPr (color difference) signals.

Handle	35	Reset All menu	32
--------------	----	----------------------	----

From projector-manual.com

DECLARATION of CONFORMITY

According to 47CFR, Part 2 and 15
Class B Personal Computers and Peripherals; and/or
CPU Boards and Power Supplies used with Class B
Personal Computers

We : EPSON AMERICA, INC.
Located at : 3840 Kilroy Airport Way
MS: 1-13
Long Beach, CA 90806
Tel : 562 - 290- 5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR 2.909 Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trade Name : EPSON
Type of Product : LCD Projector
Model : EMP-TW100 / ELP-TW100

FCC Compliance Statement For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification or Declaration of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SEIKO EPSON CORPORATION. No patent liability is assumed with respect to the use of the information contained herein. Neither is any liability assumed for damages resulting from the use of the information contained herein.

Neither SEIKO EPSON CORPORATION nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by purchaser or third parties as a result of: accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with SEIKO EPSON CORPORATION's operating and maintenance instructions.

SEIKO EPSON CORPORATION shall not be liable against any damages or problems arising from the use of any options or any consumable products other than those designated as Original EPSON Products or EPSON Approved Products by SEIKO EPSON CORPORATION.

EPSON is a registered trademark and PowerLite is a trademark of SEIKO EPSON CORPORATION.

General Notice: The following trademarks and registered trademarks are the property of their respective owners and are used in this publication for identification purposes only.

- EPSON/Seiko Epson Corp.
- Macintosh, PowerBook/Apple Computer Inc.
- IBM/International Business Machine Corp.
- Windows/Microsoft Corp.
- © 2001 Sage Inc. All rights reserved. DCDi is a registered trademark of the Faroudja business division of Sage Inc.

Other product names used herein are also for identification purposes only and may be trademarks of their respective owners. EPSON disclaims any and all rights in those marks.

EPSON®



Printed on 100% recycled paper.



Printed in Japan
402168000
(9002466)
02.01-.6A(C05)